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U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

SEARCH REQUEST FORM

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Date:	Phone:		Art Unit: 1645	
Search Topic: Please write a detailed statement of s terms that may have a special meanin please attach a copy of the sequence.	ng. Give examples or rel	levent citations, authors, ke	ywords, etc., if known. For s	Define any equences,
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Number of Searches: Number of Databases: 3		N.A. Sequence A.A. Sequence Structure	Geninfo SDC	
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' (FILE 'CAPLUS' ENTERED AT 12:02:27 ON 22 NOV 2000) 853 SEA FILE=CAPLUS ABB=ON PLU=ON (DETERM? OR DETECT? OR - Key terms DET## OR SCREEN?) (5A) CHLAMYD? 309 SEA FILE=CAPLUS ABB=ON PLU=ON L1 AND (PROBE OR REAGENT L2OR PRIMER) - L3 138 SEA FILE=CAPLUS ABB=ON PLU=ON L2 AND (HYBRIDIS? OR HYBRIDIZ?) 8 SEA FILE=CAPLUS ABB=ON PLU=ON L3 AND (POLYNUCLEOTIDE L4 OR POLY NUCLEOTIDE)

ANSWER 1 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

1999:753386 CAPLUS

DOCUMENT NUMBER:

132:1798

TITLE:

Multimolecular dévices, drug delivery systems

and single-molecule selection Cubicciotti, Roger S.

INVENTOR-(-S-)-:--

PATENT ASSIGNEE (S):

Molecular Machines, Inc., USA

SOURCE:

PCT Int. Appl., 276 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT	NO.		KI	ND :	DATE			A	PPLI	CATI	ON NO	5. 1	DATE		
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W	0 9960	169		Α	1	1999	1125		W	0 19	99-0	S112	15	1999	0520	
	W:	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,
		DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,
		IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,
*		MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	SL,	ΤJ,	TM,	TR,	TT,	UA,	ŪĠ,	UZ,	VN,	YU,	ZW,	AM,	ΑZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM									
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
A	AU 9941947 A1 19991206 AU 1999-41947 19990520															
PRIORI	TY APP	LN.	INFO	.:					U	S 19	98-8	1930		1998	0520	
									W	0 19	99-U	\$112	15	1999	0520	

AB Single-mol. selection methods are provided for detecting and identifying useful synthetic nucleotides, e.g., aptamers, ribozymes, catalytic DNA mols., nucleotide catalysts, nucleotide ligands and nucleotide receptors. Methods for selecting shape-specific probes and specifically attractive surfaces are also provided. Paired nucleotide-nonnucleotide mapping libraries for transposing selected populations of selected nonoligonucleotide mols. into selected populations of replicatable nucleotide sequences are also provided. Aptameric and nonaptameric multimol. devices, imprints and delivery systems are also provided, including mol.

adsorbents, adherents, adhesives, transducers, switches, sensors, and drug delivery systems. Thus, a 30-nucleotide defined DNA sequence capable of specifically binding to prostate-specific antigen (PSA) was selected by repeated cycles of partitioning and amplification of progressively higher-affinity nucleic acid ligands from a candidate mixt. A 2nd defined DNA segment was designed to hybridize to a region of the 1st of 2 types of single-stranded arms of the outermost layer of a 4-layer DNA dendrimer. A synthetic heteropolymer comprising these 2 defined DNA sequences sepd. by a 15-nucleotide spacer was produced with an automated DNA synthesizer. This synthetic heteropolymer was then hybridized to the 4-layer DNA dendrimer as a molar ratio of .apprx.(3-10):1 to produce a multivalent PSA-binding heteropolymeric hybrid which can be used in PSA assays which rely on secondary labeling reagents such as radiolabeled, biotinylated, ordigoxigenin-modified oligonucleotides. Alternatively, a signal-generating species such as R-phycoerythrin can be attached directly to the heteropolymeric hybrid, which can be used as a

REFERENCE COUNT:

primary labeling reagent.

REFERENCE(S):

- (1) Cubicciotti; WO 95/16788 A1 1995 CAPLUS
- (5) Gilead Sciences, Inc; WO 92/14843 1992 **CAPLUS**
- (7) National Biomedical Research Foundation; WO 85/05685 A1 1985 CAPLUS
- (8) Nexagen, Inc; WO 95/07364 Al 1995 CAPLUS
- (9) Studier; US 5547843 A 1996 CAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

1999:354445 CAPLUS

DOCUMENT NUMBER:

131:29566

TITLE:

Devices and methods for detecting target

molecules in biological samples

INVENTOR(S):

Muir, Andrew R.; Boles, Truett C.; Adams,

Christopher P.

PATENT ASSIGNEE(S):

Mosaic Technologies, USA

SOURCE:

PCT Int. Appl., 124 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ------------. WO 9926724 19990603 WO 1998-US24918 19981125 **A2**

WO 9926724 **A3** 19990902

> W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, Searcher : Shears 308-4994

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DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG,
             MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            19990615
                                         AU 1999-15975
    AU 9915975
                       A1
                                                            19981125
    EP 1034040
                       A2
                            20000913
                                           EP 1998-960365
                                                            19981125
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, FI
                                           US 1997-66508
PRIORITY APPLN. INFO.:
                                                            19971125
                                           WO 1998-US24918 19981125
    Devices and methods for detecting the presence, or absence of the
AΒ
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presence, of at least one target mol. employing a receptable housing a reaction chamber comprised of at least one compartment contg. suitable reagents for the detection of the target mol. are disclosed. The device can be used in particular for screening donated blood or other biol. fluids for the presence of contaminants. Preferably, the device comprises two or more breakable compartments sepd. by breakable barriers, and is assocd. with a collection system such as a blood bag. Probes and assays for detection of eubacterial contamination in platelet conc. are described.

ANSWER 3 OF 8 CAPLUS COPYRIGHT 2000 ACS ACCESSION NUMBER:

1998:747619 CAPLUS

DOCUMENT NUMBER:

130:12131

TITLE:

Two-step hybridization method for immobilization of a polynucleotide

onto a solid support

INVENTOR(S):

Weisburg, William G.; Shaw, Jay H.; Becker,

Michael M.; Majlessi, Mehrdad

PATENT ASSIGNEE(S):

Gen-Probe Inc., USA

SOURCE:

PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9850583	A1	19981112	WO 1998-US8853	19980501

W: AU, CA, JP, KR

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

NL, PT, SE

19981127 AU 1998-72751 19980501 AU 9872751 A1

EP 975807 A1 20000202 EP 1998-920106 19980501 R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE US 1998-70998 20000829 US 6110678 Α 19980501 PRIORITY APPLN. INFO.: US 1997-45430 19970502 WO 1998-US8853 19980501 AB A method for capturing a target polynucleotide in a sample onto a solid support with an attached immobilized probe by using a capture probe and two different hybridization conditions, which preferably differ in temp. only, is disclosed. The two hybridization conditions control the order of hybridization, where the first hybridization condition allows the capture probe and the target polynucleotide to hybridize, and the second hybridization condition allows the capture probe and the immobilized probe to hybridize, to produce_a_complex_of-immobilized probe , capture probe and target polynucleotide. A method for detg. the presence of a target polynucleotide in a sample by capturing a target polynucleotide, amplifying the captured target polynucleotide and detecting amplified sequences is also disclosed, which may be used in mol. diagnosis. Examples are presented wherein various bacteria are detected by this method. REFERENCE COUNT: REFERENCE(S): (1) Amoco Corp; EP 0265244 A 1988 (2) Amoco Corp; EP 0328829 A 1989 (3) Enzo Biochem Inc; EP 0526912 A 1993 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2000 ACS T.4 1994:70885 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 120:70885 Chlamydiae probes for use in solution TITLE: phase sandwich hybridization assays INVENTOR (S): Sanchez-Pescador, Ray; Besemer, Diana J.; Urdea, Michael S. PATENT ASSIGNEE(S): Chiron Corp., USA PCT Int. Appl., 84 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE ----------______ WO 9313221 WO 1992-US11035 19921222 A1 19930708

W: AU, CA, JP, KR

Searcher : Shears 308-4994

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT,

AU 9334672 A1 19930728 AU 1993-34672 19921222 EP 726963 A1 19960821 EP 1993-903387 19921222 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE US 5618674 19970408 US 1995-479487 19950607 Α PRIORITY APPLN. INFO.: US 1991-813587 19911223 WO 1992-US11035 19921222

The title probes, i.e. amplifier probe and AB capture probe, comprise a first segment with nucleotide sequence substantially complementary to a segment of Chlamydiae plasmid DNA and a second segment with nucleotide sequence substantially complementary to an oligonucleotide multimer or an oligonucleotide bound to a solid phase, resp. Thus, a comb-type polynucleotide having 15 branch sites and side chain extensions having 3 labeled probe binding_sites_wassynthesized and used as a labeled multimer. The amplifier and capture probes are hybridized with sample, the formed complexes are captured by oligonucleotide-bound solid phase, and the captured complexes are hybridized with the oligonucleotide multimer and complementary labeled oligonucleotide for Chlamydiae detection.

ANSWER 5 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1993:185109 CAPLUS

DOCUMENT NUMBER:

118:185109

TITLE:

Novel amplification method for

polynucleotide assays

INVENTOR(S):

Dattagupta, Nanibhushan; Sullivan, Elizabeth C.

APPLICATION NO. DATE

PATENT ASSIGNEE(S):

Miles Inc., USA

SOURCE:

Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

KIND DATE

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.

	EP 530526	A1 19930310	EP 1992-113394	19920806
	R: AT, BE,	CH, DE, DK, ES, FR	, GB, GR, IE, IT, LI	, LU, MC, NL,
	PT, SE			
	US 5294534	A 19940315	US 1991-744548	19910813
PRIO	RITY APPLN. INFO	.:	US 1991-744548	19910813
AB	A nucleic acid	sequence is detecte	d in a sample by (1)	treating the
	sample under hy	bridization condition	ons with an	
	oligonucleotide	that lacks a recogn	nition site for enzy	me digestion,
	_	he hybridization pro	-	•
	_	-		
			hates to create, on	
	oligonucleotide	strand, a recognit	ion site for enzyme (digestion, (3)
		Searcher	: Shears 308-49	94

hybridizing the oligonucleotide strand to a labeled probe which is immobilized or immobilizable and contains a recognition site for enzyme digestion that is completely or partially complementary to the recognition site for enzyme digestion on the oligonucleotide strand, (4) digesting the hybridization product with restriction endonuclease, and (5) detecting the sepd. label which is released in soln. A kit for detection of a nucleic acid sequence comprises a labeled probe, an oligonucleotide sequence for extension, and a restriction endonuclease. Thus, Chlamydia DNA was detected by use of a synthetic 22-mer oligonucleotide representing a portion of the gene for the major outer membrane protein of C. trachomatis, which was 5' end labeled with 32P using T4 polynucleotide kinase and 3' end labeled with biotin by thermocycling 30 times in the presence of biotin-11-dUTP, Tagpolymerase, and a DNA sample. The amplified product was immobilized on streptavidin-coated magnetic particles, hybridized with a single-stranded complementary oligonucleotide contg. a restriction site for AluI, digested with AluI, and released radioactivity was detd. in the supernatant, after magnetic particle sepn., by denaturing gel electrophoresis. Extension of the labeled probe occurred in a specific manner, limited by the complementarity of the hybridizing sequence.

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

1990:232268 CAPLUS

DOCUMENT NUMBER:

112:232268

TITLE:

Nucleic acid hybridization assays

using acridinium ester-labeled probes

INVENTOR(S):

Arnold, Lyle John; Nelson, Norman C. ML Technology Ventures, L. P., USA

PATENT ASSIGNEE(S):

Eur. Pat. Appl., 35 pp.

SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΕP	309230	A2	19890329	EP 1988-308767	19880921
ΕP	309230	A 3	19900711		
ΕP	309230	B1	19950621		
	R: AT, BE,	CH, DE	, ES, FR, GB,	GR, IT, LI, LU, NL	, SE
WO	8902476	A1	19890323	WO 1988-US3195	19880921
	W: AU, DK,	FI, JP	, KR, NO, US		
AU	8825541	A1	19890417	AU 1988-25541	19880921
ΑU	633474	B2	19930204		
JP	02503147	T2	19901004	JP 1988-508490	19880921
			Searcher :	Shears 308-499	94

EP	63880	7	A:	l 1995	0215	I	EP 1994-1	17589	19880921
	R:	AT, E	BE, CH,	DE, ES,	FR, (GB, GR	IT, LI,	LU,	NL, SE
ES	20740	51	T	1995	0901	I	ES 1988-3	08767	19880921
CA	13398	72	A	l 1998	0519	(CA 1988-5	77986	19880921
FI	89024	35	Α	1989	0519	1	I 1989-2	435	19890519
DK	89024	48	Α	1989	0620	I	K 1989-2	448	19890519
NO	89020	43	A	1989	0717	1	IO 1989-2	043	19890522
US	56396	04	A	1997	0617	τ	JS 1993-1	61706	19931203
US	59488	99	Α	1999	0907	τ	JS 1995-4	62823	19950605
US	60047	45	A	1999	1221	τ	JS 1995-4	65435	19950605
PRIORITY	APPL	N. IN	IFO.:			Ţ	JS 1987-9	9392	19870921
						I	EP 1988-3	08767	19880921
						V	70 1988-U	JS3195	19880921
						Ţ	IS 1988-2	94700	19881212
						J	<u>IS 1990-5</u>	28920	199005 23
						t	JS -1-990 - 6	13603	19901108
	* . = .		. "			τ	JS 1993-1	61706	19931203

OTHER SOURCE(S):

MARPAT 112:232268

GI

AΒ Improved homogeneous diagnostic assay methods and labels for detecting an analyte in a medium when the analyte is a member of a specific binding pair are described. The methods and labels provide procedures for reducing background and increasing sensitivity. binding partner of the analyte is labeled with a substance, the stability of which detectably changes whenever said analyte is bound as a member of the specific binding pair. In a closely related system, the analyte is labeled with a substance susceptible to differential degrdn. depending on whether or not the analyte is bound as a member of its specific binding pair. After incubation and selective degrdn. or chem. or biochem. alteration, the amt. of analyte bound is detected by measuring either the stability change or the extent of degrdn. of the label. In a particular system, probes labeled with chemiluminescent acridinium ester I [X = O, N, (substituted) S, halo, substituted P, substituted B, substituted As; Y = O, S, NH; R1 = (substituted) alkyl, alkenyl,

aryl, etc., or absent when X = halo; R2 = H, alkyl, (substituted) alkenyl, alkoxy, etc., or aryloxy if X = N; R3 = H, NH2, OH, SH, halo, etc.; R4 = alkyl, alkenyl, aryl, etc.; .gtoreq.1 R1-4 contains conjugation site) are used in a homogeneous hybridization assay format for detecting the presence of target polynucleotide sequences. An amine linker-arm reagent CF3C:ONH(CH2)6OP(OMe)N(Me2CH)2 (II) was prepd. by reacting NH2(CH2)5CHOH with S-ethyltrifluorothioacetate, hydrolysis with pyridine, and phosphitylation by std. methods. II was inserted into CGTTACTCGGATGCCCAAATATCGCCACATTCG (complementary to Chlamydia trachomatis 16S rRNA) by replacement of A-21 according to U.S. Patent App. 99050 and the probe was then labeled with I at the II-insertion site. The labeled probe was then hybridized with C. trachomatis rRNA or mixed with H2O (control), and chemiluminescence was measured for 1500 min-Half-life for loss at chemiluminescence of the hybridized probe was 3370 min, vs. 29.2 min for unhybridized probe.

L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

1990:194916 CAPLUS

DOCUMENT NUMBER:

112:194916

TITLE:

Nucleic acid multimers and amplified nucleic

acid hybridization assays and immunoassays using the multimers

INVENTOR(S):

Urdea, Michael S.; Warner, Brian; Running, Joyce

A.; Kolberg, Janice A.; Clyne, Jennifer M.;

Sanchez-Pescador, Ray; Horn, Thomas

PATENT ASSIGNEE(S):

Chiron Corp., USA

SOURCE:

PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8903891	A1	19890505	WO 1988-US3644	19881014
W: DK				
JP 02109999	A2	19900423	JP 1988-260347	19881015
JP 2565552	B2	19961218		
EP 317077	A1	19890524	EP 1988-309697	19881017
EP 317077	B1	19960131		
R: AT, BE,	CH, DE	, ES, FR, GB,	GR, IT, LI, LU, NL	, SE
AT 133713	E	19960215	AT 1988-309697	19881017
ES 2083363	Т3	19960416	ES 1988-309697	19881017
DK 8902945	A	19890815	DK 1989-2945	19890615
US 5656731	A	19970812	US 1993-85681	19930701
		Searcher :	Shears 308-49	94

US 5359100	Α	19941025	US	1993-107358	19930813
US 5571670	Α	19961105	US	1993-167435	19931214
US 5614362	A	19970325	US	1994-315685	19940930
JP 07303498	A2	19951121	JP	1995-20842	19950208
JP 2749277	B2	19980513			
US 5594118	A	19970114	US	1995-438413	19950510
US 5624802	A	19970429	US	1995-479493	19950607
PRIORITY APPLN. INFO.:			US	1987-109282	19871015
			US	1988-185201	19880422
			US	1988-252638	19880930
			WO	1988-US3644	19881014
			US	1989-340031	19890418
			US	1990-463022	19900110
			US	1990-519212	19900504
			US	<u> 1992-823890</u>	<u> 19920122 </u>
			US-	1992-824795	19920122
i veri e e e e e e e e e e e e e e e e e e			US	1993-163916	19931208
OMITTED GOTTEGER (A)	343 T	DDD 110 104016			

OTHER SOURCE(S): MARPAT 112:194916

Linear or branched oligonucleotide multimers useful as amplifiers in biochem. assays are prepd. comprising .qtoreq.1 1st single-stranded oligonucleotide unit that is complementary to a single-stranded oligonucleotide sequence of interest and a multiplicity of 2nd single-stranded oligonucleotide units that are complementary to a single-stranded labeled oligonucleotide. Amplified (sandwich) nucleic acid hybridization assays and immunoassays using the multimers are exemplified as well as capture and amplifier probes useful in these assays. A sandwich hybridization assay for Neisseria gonorrhoeae DNA used probes based on N. gonorrhoeae genomic sequence SSJK1. Capture and amplification 50-mer probes comprised 30 nucleotides complementary to regions of SSJK1 in their 5' end and either the sequence CTTCTTTGGAGAAAGTGGTG (I) or TTAGGCATAGGACCCGTGTC (II), resp., at the 3' end. A 21-mer complementary to I was immobilized in microtiter wells. An amplification multimer comprising a 5-site comb structure had branches complementary to II and to an oligonucleotide labeled with alk. phosphatase or horseradish peroxidase. Crude cellular lysates and genomic DNA from different bacteria were assayed. Only N. gonorrhoeae samples (17 strains representing various serotypes) were pos. with signal-to-noise ratios >3. A 4-site comb amplification multimer was synthesized by treating (TTO)3TTGACACGGGTCCTATGCCT [O = 5'-dimethoxytrityl-N4-(O-levulinylhexamethylene)-5-methylcytidine Me phosphoramidite] with hydrazine in pyridine/HOAc (8:2) to remove the O-levulinyl group, synthesizing an 18-mer complementary to II off the 5' end and at each O residue, deprotecting, etc.

L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2000 ACS ACCESSION NUMBER: 1989:511985 CAPLUS

DOCUMENT NUMBER: 111:111985

TITLE:

Polycationic supports for nucleic acid

purification, separation and

hybridization

INVENTOR (S):

Lyle, J. Arnold, Jr.; Nelson, Norman C.;

Reynolds, Mark A.; Waldrop, Alexander A., III

PATENT ASSIGNEE(S):

SOURCE:

Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PRIORITY APPLN. INFO.:

KIND DATE PATENT NO. APPLICATION NO. DATE ----------______ A2 19880907 EP 1988-301839 19880302 -EP--2-813-90-----EP 281390 19900425 A3 EP 281390 B1 19940622 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE WO 8806633 A1 19880907 WO 1988-US550 19880302 W: AU, DK, FI, JP, KR, NO, US AU 1988-14269 AU 8814269 A1 19880926 19880302 AU 618951 B2 19920116 JP 01502319 T2 19890817 JP 1988-502502 19880302 JP 2862547 B2 19990303 ES 2054797 T3 19940816 ES 1988-301839 19880302 NO 8804847 A 19881222 NO 1988-4847 19881031 FI 8805022 FI 1988-5022 A 19881101 19881101 DK 8806075 Α 19881228 DK 1988-6075 19881101 US 5599667 Α 19970204 US 1994-311289 19940923

US 1992-893895 19920604 AB Polycationic solid supports can be used to selectively adsorb nucleotide multimers according to their size, larger ones being more tightly bound to the support than smaller ones. The supports are used to noncovalently bind nucleic acids to permit their sepn. from contaminants and in nucleic acid hybridization assays to sep. polynucleotides and hybrids with a nucleotide probe from unhybridized probe. Assays, kits, and elution solns. are also discussed. Throat swab material was placed

in Li dodecylsulfate 3%, phosphate buffer (pH 6.8) 30, and EDTA and EGTA 1 mM. A chemiluminescent acridinium ester-labeled deoxyoligonucleotide probe (33-mer) specific for Chlamydia trachomatis rRNA (AE-probe) was hybridized in

the throat swab material 60 min at 60.degree.. A sepn. soln. contg. phosphate buffer (pH 6.0) 0.4M, Triton X-100 5%, diisobutyl sulfosuccinate 8%, and magnetic amine microspheres (BioMag M4100)

> Searcher : Shears

308-4994

US 1987-20866

WO 1988-US550

US 1988-294689

19870302

19880302

19880302

2.5 mg was added and the mixt. was vortexed and incubated an addnl. 5 min at 60.degree.. The magnetic microspheres were magnetically pulled to the side of the tube, the supernatant was decanted off, the spheres were washed 3 times, and bound probe was eluted from the spheres with phosphate buffer (pH 6.0) 0.2M contg. formamide 50%. The supernatant was removed and chemiluminescence was measured for detection of C. trachomatis.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, TOXLIT, TOXLINE, PHIC, PHIN' ENTERED AT 12:09:13 ON 22 NOV 2000)

L5 21 S L4

21 DUP REM L5 (0 DUPLICATES REMOVED) L6

ANSWER 1 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD L6

ACCESSION NUMBER:

2000-618918 [59] WPIDS

DOC. NO. CPI:_____C2000-185418

TITLE:

New polynucleotides encoding a 60kda

cysteine-rich membrane protein from Chlamydia, useful as a vaccine for preventing and treating

ing province and the second of the second of

Chlamydia infection in mammals.

DERWENT CLASS:

B04 D16

INVENTOR(S):

DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J

PATENT ASSIGNEE(S): (AVET) AVENTIS PASTEUR LTD

COUNTRY COUNT:

90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000055326 Al 20000921 (200059)* EN 77

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

APPLICATION DETAILS:

APPLICATION PATENT NO KIND DATE ______ WO 2000055326 A1 WO 2000-CA240 20000309

PRIORITY APPLN. INFO: US 1999-123966 19990312

AN 2000-618918 [59] WPIDS

WO 200055326 A UPAB: 20001117 AB

> NOVELTY - A polynucleotide (I) comprising a nucleotide sequence encoding a polypeptide (IV) of a Chlamydia 60 kDa cysteine-rich membrane protein, is new.

DETAILED DESCRIPTION - A new **polynucleotide** encoding (IV) comprises:

- (a) a polypeptide having a sequence of 556 amino acids, given in the specification;
- (b) an immunogenic fragment comprising at least 12 consecutive amino acids from a polypeptide of (a); and
- (c) a polypeptide of (a) or (b) which has been modified to improve its immunogenicity, where the modified polypeptide is at least 75 % identical to the corresponding polypeptide of (a) or (b).

INDEPENDENT CLAIMS are also included for the following:

- (1) a nucleic acid molecule (II) comprising a nucleic acid sequence which encodes a fusion protein, the fusion protein comprising a polypeptide encoded by a nucleic acid molecule and additional polypeptide;
- (2) a vaccine (III) comprising (I) or (II) and a vaccine vector comprising a first nucleic acid expressing a polypeptide (II) and a second nucleic acid encoding an additional polypeptide enhancing the immune response of the polypeptide;
 - (3) a unicellular host transformed with (I) or (II);
- (4) a nucleic acid probe of 5 to 100 nucleotides or a primer of 10-40 nucleotides hybridizing under stringent conditions to (I) or its homolog, complementary or anti-sense sequence;
 - (5) (IV) encoded by (I) or (II);
- (6) a fusion polypeptide (V) comprising (IV) and an additional polypeptide;
 - (7) preparation of (IV);
 - (8) an antibody (Ab) specific to (IV) or (V);
- (9) a pharmaceutical composition (C) comprising (I), (II),
 (III) or (Ab);
- (10) a diagnostic kit comprising instructions for use and (I), (II), (IV), (V) or (Ab);
- (11) identifying a polypeptide inducing an immune response effective to prevent or minimize the severity of Chlamydia infection in a mammal previously immunized with a polypeptide, comprising immunizing a mouse with a polypeptide, inoculating the immunized mouse with Chlamydia, detecting the effect of the polypeptide on the severity of Chlamydia infection in the immunized mouse and comparing to a non-immunized control mouse; and
 - (12) an expression plasmid pCACRMP60.

Searcher

ACTIVITY - Antibacterial. No suitable biological data is given.

MECHANISM OF ACTION - Vaccine. Groups of 7-9 week old male

Balb/c mice (8-10 per group) were immunized intramuscularly (i.m.),

(alternate left and right quadriceps were injected with 100 micro g

of (I), in 50 micro l of phosphate buffer solution (PBS) on three

occasions at 0, 3 and 6 weeks) and intranasally (i.n.) (anesthetized

mice aspirated 50 micro l of PBS containing 50 micro g (I) on three

occasions at 0, 3 and 6 weeks). Saline or a plasmid vector lacking

an inserted Chlamydia gene was given to groups of control animals.

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Shears

308-4994

At week 8, immunized mice were inoculated i.n. with 5 multiply 105 infectious units (IFU) of Chlamydia pneumoniae strain AR39 to test their ability to limit the growth of the bacteria. Lungs were taken from mice at days 5 and 9, homogenized and diluted. The diluted homogenate were assayed for the presence of infectious Chlamydia. Mice immunized with pCACRMP60 had Chlamydial lung titers less than 1400 in 4 out of 4 cases at day 5, but the range of values for control mice sham immunized with saline was 1200-2100 IFU/lung at day 9.

USE - (I), (IV), a nucleic acid (II) encoding a fusion protein or polypeptide (V) comprising (IV), a vaccine (III) comprising (I) or (II), (V), an antibody (Ab) to (IV) or (V), or a pharmaceutical composition (C) comprising (I), (HI), (HII) or (Ab) is useful for preventing or treating Chlamydia infection. (I), (II), (IV), (V) or (Ab) is useful for diagnosing Chlamydia infection by assaying a body fluid of a mammal.

Dwg.0/4

L6 ANSWER 2 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-587438 [55] WPIDS

DOC. NO. CPI:

C2000-175246

TITLE:

Polynucleotides encoding 9 kDa

cysteine-rich membrane protein from chlamydia, useful as a vaccine for preventing and treating

chlamydia infection in mammals.

DERWENT CLASS:

B04 D16

INVENTOR(S):

DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J

PATENT ASSIGNEE(S):

(AVET) AVENTIS PASTEUR LTD

COUNTRY COUNT:

90

PATENT INFORMATION:

PATENT N	10	KIND	DATE	WEEK	LA	PG

WO 2000053764 A1 20000914 (200055) * EN 68

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
WO 2000053764 A1	WO 2000-CA239	20000309

PRIORITY APPLN. INFO: US 1999-123968 19990312

AN 2000-587438 [55] WPIDS

AB

WO 200053764 A UPAB: 20001102

NOVELTY - Nucleic acid molecule (I) encoding a 9 kDa cysteine-rich Chlamydia membrane protein (II), is new.

DETAILED DESCRIPTION - Nucleic acid molecule (I) encoding a 9 kDa cysteine-rich Chlamydia membrane protein (II), is new. (II) is selected from:

- (a) a polypeptide having 90 amino acid sequence (S1) fully defined in the specification;
- (b) an immunogenic fragment comprising at least 12 consecutive amino acids of (S1); or
- (c) a polypeptide (IIa) of (a) or (b) which have been modified to improve its immunogenicity, where (IIa) is at least 75% identical in amino acid sequence to the corresponding polypeptide of (a) or (b).

INDEPENDENT CLAIMS are also included for the following:

- (1) a nucleic acid molecule (N1) comprising a sequence selected from:
- (a) the 600 base pair (bp) sequence (S2) defined in the specification;
 - (b) a sequence which encodes a polypeptide encoded by S2;
- (c) a sequence comprising at least 38 consecutive nucleotides from any one of the sequences of (a) or (b); or
- (d) a sequence which encodes a polypeptide which is at least 75 % identical in amino acid sequence to the polypeptides encoded by S1;
 - (2) an antisense nucleic acid molecule (N2) to (I);
- (3) a nucleic acid molecule (III) encoding a fusion protein (IV) comprising (II) and an additional polypeptide;
 - (4) a vaccine (V) comprising:
- (a) a first nucleic acid of (I), (III) or N1, and a vaccine vector, where the first nucleic acid expresses a polypeptide; and
- (b) optionally a second nucleic acid encoding an additional polypeptide enhancing the immune response of the polypeptide;
 - (5) an unicellular host transformed with (I), (III), N1 or N2;
- (6) a nucleic acid probe of 5-100 nucleotides or a primer (P) of 10-40 nucleotides hybridizing under stringent conditions to (S2) or to its homolog or complementary or antisense sequence;
 - (7) a polypeptide encoded by (I), (III), N1 or N2;
 - (8) a polypeptide comprising the sequence of (II);
 - (9) (IV) encoded by (III);
- (10) preparation of the polypeptide of (7) or (8) by culturing the unicellular host of (5);
- (11) an antibody (Ab) specific to the polypeptides of (7), (8)
 or (IV);
- (12) a vaccine comprising at least one polypeptide of (7), (8) or (IV) and optionally comprising a second polypeptide which enhances the immune response to the first polypeptide;

- (13) a diagnostic kit comprising (I), (III), N1, N2, (II), the polypeptides of (7) or (8), or Ab;
- (14) a method for identifying a polypeptide capable of inducing immune response effective to prevent or minimize the severity of Chlamydia infection a mammal previously immunized with polypeptide comprising immunizing a mouse with a polypeptide and inoculating the immunized mouse with Chlamydia and detecting the effect of the polypeptide on the severity of Chlamydia infection in the immunized mouse and compared to non-immunized control mouse;
 - (15) expression plasmid pCACRMP9;
- (16) a nucleic acid molecule comprising the 43 (S3) or 31 (S4) nucleotide sequence defined in the specification; and
- (17) a 9 kDa cysteine-rich membrane protein from Chlamydia pneumoniae.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

Groups of 7-9 week old male Balb/c mice (7-10 per group) were immunized intramuscularly (i.m.) (alternate left and right quadriceps were injected with 100 mu g of (I), in 50 mu l of phosphate buffer solution (PBS) on three occasions at 0, 3 and 6 weeks) and intranasally (i.n.) (anesthetized mice aspirated 50 mu l of PBS containing 50 mu g (I) on three occasions at 0, 3 and 6 weeks). Saline or the plasmid vector lacking an inserted chlamydia gene was given to groups of control animals. At week 8, immunized mice were inoculated i.n. with 5 x 105 IFU (undefined) of Chlamydia pneumoniae strain AR39 to test their ability to limit the growth of the bacteria. Lungs were taken from mice at days 5 and 9, homogenized and diluted. The diluted homogenate were assayed for presence of infectious Chlamydia. Mice immunized with pCACRMP9 has Chlamydial lung titers less than 2600 in 4 of 4 cases at day 9, but the range of values for control mice sham immunized with saline was 1100-12400 IFU/lung at day 9.

USE - (I), (II), (V) or Ab is useful for preventing and treating Chlamydia infection. (I), (II) or Ab is useful for detecting Chlamydia infection. The method comprises assaying a body fluid of a mammal suspected to have the infection with (I), (II) or Ab (claimed).

Dwg.0/4

L6 ANSWER 3 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2

2000-452369 [39] WPIDS

DOC. NO. NON-CPI:

N2000-336786

DOC. NO. CPI:

C2000-137918

TITLE:

Novel Chlamydia polynucleotides and

polypeptides useful for diagnosis, prevention and

treatment of Chlamydia infection in mammals.

DERWENT CLASS:

B04 D16 S03

INVENTOR (S):

MURDIN, A D; OOMEN, R P; WANG, J

PATENT ASSIGNEE(S):

(AVET) AVENTIS PASTEUR LTD; (CONN-N) CONNAUGHT LAB

LTD

COUNTRY COUNT:

90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000039158 A1 20000706 (200039) * EN 215

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM

 $\ \, \text{EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ}$

LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000018517 A 20000731 (200050)

APPLICATION DETAILS:

PA	TENT NO	KIND	AP	PLICATION	DATE
WO.	200003915	8 A1			19991223
	200001851		ΑU	2000-18517	19991223

FILING DETAILS:

PATENT NO KIND PATENT NO

AU 2000018517 A Based on

WO 200039158

PRIORITY APPLN. INFO: US 1998-114061 19981228; US 1998-113280

19981223; US 1998-113281 19981223; US 1998-113282 19981223; US 1998-113283 19981223; US 1998-113284 19981223; US 1998-113285 19981223; US 1998-113385 19981223; US 1998-114056 19981228; US 1998-114056 19981228; US 1998-114057 19981228; US 1998-114058 19981228; US

1998-114059 19981228

AN 2000-452369 [39] WPIDS

AB WO 200039158 A UPAB: 20000818

NOVELTY - A nucleic acid molecule (I) comprising a nucleic acid sequence which encodes a Chlamydia polypeptide having a sequence (S1) of 552, 196, 245, 278, 469, 922, 375, 871, 963, 514, 289, 265 or 95 amino acids, an immunogenic fragment comprising 12 consecutive amino acids from (S1) or a sequence 75% identical to (S1), is new. S1 is fully defined in the specification.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid (NA) molecule (II) comprising a nucleic acid sequence which is anti-sense to (I) operatively linked to one or Searcher: Shears 308-4994

more expression control sequences;

- (2) a NA molecule (III) comprising a NA sequence which encodes a fusion protein comprising a polypeptide encoded by (I) and an additional polypeptide;
 - (3) a unicellular host transformed with (I);
- (4) a nucleic acid probe of 5-100 nucleotides which hybridizes under stringent conditions to (I) or its homolog, complement or anti-sense sequence;
- (5) a primer of 10-40 nucleotides which hybridizes under stringent conditions to (I) or its homolog, complement or anti-sense sequence;
 - (6) a Chlamydia polypeptide (IV) encoded by (I), (II) or (III);
- (7) a fusion polypeptide comprising (IV) and an additional polypeptide;
 - (8) preparation of (IV);
 - (9) an antibody (V) against (IV);
- (10) a vaccine (VI) comprising (IV) or (I) expressing a polypeptide and a vaccine vector, where the vaccine optionally comprises another nucleic acid encoding an additional polypeptide which enhances the immune response to the polypeptide expressed by (I);
- (11) a diagnostic kit comprising instruction for use and (I), (IV) or (V); and
- (12) a method for identifying a Chlamydia polypeptide which induces an immune response effective to prevent or lessen the severity of Chlamydia infection in a mammal previously immunized with polypeptide, comprising immunizing a mouse with the polypeptide and inoculating the immunized mouse with Chlamydia, where the polypeptide which prevents or lessens Chlamydia infection in the immunized mouse compared to a non-immunized control mouse is identified.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

No biological data given.

USE - (I), (IV), (V) or (VI) is useful for preventing or treating Chlamydia infection. (I), (IV) or (V) is useful for diagnosing Chlamydia infection in the body fluid of a mammal (claimed). Primers or probes derived from (I) are useful in diagnostic test for detecting Chlamydia infection.

Dwg.0/26

L6 ANSWER 4 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-4523

2000-452368 [39] WPIDS

DOC. NO. NON-CPI:

N2000-336785 C2000-137917

DOC. NO. CPI:

Novel Chlamydia polynucleotides and

TITLE:

polypeptides, useful for diagnosis, prevention and

treatment of Chlamydia infection in mammals.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J

PATENT ASSIGNEE(S):

(AVET) AVENTIS PASTEUR LTD; (CONN-N) CONNAUGHT LAB

LTD

COUNTRY COUNT:

90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000039157 A1 20000706 (200039)* EN 81

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU

-SD-SE-SG-SI-SK-SL_TJ_TM_TR_TT-TZ-UA-UG-US-UZ-VN-YU-ZA-ZW

- - AU 2000017652 A 20000731 (200050)

APPLICATION DETAILS:

PATENT NO K	IND	APPLICATION	DATE
WO 2000039157	A1	WO 1999-CA1224	19991222
AU 2000017652	A	AU 2000-17652	19991222

FILING DETAILS:

PATENT NO	KIND	1	PATI	ENT NO
AII 200001769	CO N Bacad	on t	MO 1	000039157

AU 2000017652 A Based on

WO 200039157

PRIORITY APPLN. INFO: US 1999-141271 19990630; US 1998-114060 19981228; US 1999-123967 19990312

AN 2000-452368 [39] WPIDS

AB WO 200039157 A UPAB: 20000818

NOVELTY - A nucleic acid molecule (I) comprising a nucleic acid sequence which encodes a Chlamydia polypeptide having a sequence (S1) of 515 amino acids or an immunogenic fragment comprising 12 consecutive amino acids from (S1) or a sequence 75% identical to (S1) fully defined in the specification, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a nucleic acid (NA) molecule (II) comprising a nucleic acid sequence which is anti-sense to (I);
- (2) a NA molecule (III) comprising a NA sequence which encodes a fusion protein comprising a polypeptide encoded by (I) and an additional polypeptide;
 - (3) a unicellular host transformed with (I);
 - (4) a nucleic acid **probe** of 5-100 nucleotides which Searcher : Shears 308-4994

hybridizes under stringent conditions to (I) (or its homolog, complement or anti-sense sequence);

- (5) a primer of 10-40 nucleotides which
 hybridizes under stringent conditions to (I) (or its
 homolog, complement or anti-sense sequence);
 - (6) a Chlamydia polypeptide (IV) encoded by (I), (II) or (III);
- (7) a fusion polypeptide comprising (IV) and an additional polypeptide;
 - (8) preparation of (IV);
 - (9) an antibody (V) against (IV);
- (10) a vaccine (VI) comprising (I) expressing a polypeptide and a vaccine vector, where the vaccine optionally comprises another nucleic acid encoding an additional polypeptide which enhances the immune response to the polypeptide expressed by (I) or (IV) and another polypeptide which enhances the immune response—to—(IV);
 - (11) a diagnostic kit comprising (I), (IV) or (V);
- (12) a method for identifying (IV) which induces an immune response effective to prevent or lessen the severity of Chlamydia infection in a mammal previously immunized with polypeptide, comprising immunizing a mouse with the polypeptide and inoculating the immunized mouse with the Chlamydia, where the polypeptide prevents or lessens Chlamydia infection in the immunized mouse compared to non-immunized control mouse is identified;
 - (13) an expression plasmid pCAI640; and
- (14) an ATP (adenosine triphosphate)/ADP (adenosine monophosphate) translocase from Chlamydia.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

The ATP/ADP translocase gene was amplified from Chlamydia pneumoniae genomic DNA by using **primers**:

- 5'-ATAAGAATGCGGCCGCCACCATGACAAAAACCGAAGAAAAACC-3' and
- 5'-GCGCCGGATCCCTGAAGAAGCAGGAGCTG-3'.

After amplification, the polymerase chain reaction (PCR) fragment was purified and then digested with Not I and Bam HI and cloned into the pCA-Myc-His eukaryotic expression vector with transcription under control of the human Cytomegalovirus (CMV) promoter. The Not I/Bam HI restricted PCR fragment containing the ATP/ADP translocase gene was ligated into the Not I and Bam HI restricted plasmid pCA/Myc-His to produce plasmid pCAI764. Groups of Balb/c mice were immunized with plasmid DNA containing the coding sequence of Chlamydia pneumoniae ATP/ADP translocase. Saline or the plasmid vector lacking an inserted chlamydial gene was given to groups of control animals. Lungs were taken from mice at days 5 and 9 post challenge and immediately homogenized and dilutions of the homogenate were assayed for the presence of infectious Chlamydia. The inoculum was centrifuged, incubated and the monolayers were fixed with formalin and methanol and then immunoperoxidase stained for the presence of chlamydial inclusions using convalescent sera from rabbits infected with Chlamydia pneumoniae and metal-enhanced

DAB (undefined) as a peroxidase substrate. It was found that mice immunized with pCAI764 had chlamydial lung titers (measured as IFU (undefined)/lung) less than 2700 in 4 of 4 cases at day 5 and less than 3100 in 4 of 4 cases at day 9, while the range of values for control mice sham immunized with saline was 6600-19000 IFU/lung (mean 12120) at day 5 and 2000-19300 IFU/lung (mean 9500) at day 9.

USE - (I), (IV), (V) or (VI) is useful for preventing or treating Chlamydia infection. (I), (IV) or (V) are useful in the detection of Chlamydia infection (claimed).

Primers or probes derived from (I) are useful in diagnostic tests for detecting Chlamydia infection.

Dwg.0/4

ANSWER 5 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-412330 [35] WPIDS

DOC. NO. NON-CPI:

N2000-308175

DOC. NO. CPI:

C2000-125057

TITLE:

New polynucleotide encoding the Chlamydia

98 kiloDalton outer membrane protein, useful for

preventing or treating Chlamydia infection.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

DUNN, P; MURDIN, A D; OOMEN, R P; WANG, J

PATENT ASSIGNEE(S): (CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

89

WO 2000032784 A1 20000608 (200035)* EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000037909 A 20000619 (200044)

APPLICATION DETAILS:

PATI	ENT NO	KIND	APPLICATION DATE
WO 2	20000327	84 A1	WO 1999-CA1148 19991201
AU 2	20000379	09 A	AU 2000-37909 19991201

FILING DETAILS:

PATENT NO KIND PATENT NO

> Shears 308-4994 Searcher :

AU 2000037909 A Based on

WO 200032784

PRIORITY APPLN. INFO: US 1999-132272 19990503; US 1998-110439 19981201

AN 2000-412330 [35] WPIDS

AB WO 200032784 A UPAB: 20000725

NOVELTY - Isolated **polynucleotide** (N1) encoding the Chlamydia 98 kiloDalton (kDa) outer membrane protein, known as CPN100640, is new.

DETAILED DESCRIPTION - Isolated **polynucleotide** (N1) encoding the Chlamydia 98 kiloDalton (kDa) outer membrane protein, is new.

N1 comprises a nucleic acid sequence selected from:

- (a) the 3050 (I) or 2808 (II) nucleotide sequence defined in the specification;
- (b) a sequence which encodes a polypeptide encoded by (I) or (II);
- (c) a sequence comprising at least 38 consecutive nucleotides from any one of the nucleic acid sequences of (a) and (b); and
- (d) a sequence which encodes a polypeptide which is at least 75% identical in amino acid sequence to the polypeptides encoded by (I) or (II).

INDEPENDENT CLAIMS are also included for the following:

- (1) a nucleic acid molecule (N2) comprising a nucleic acid sequence which encodes a polypeptide selected from:
- (a) the 936 (III) or 925 (IV) amino acid sequence defined in the specification;
- (b) an immunogenic fragment comprising at least 12 consecutive amino acids from a polypeptide of (a); and
- (c) a polypeptide of (a) or (b) which has been modified to improve its immunogenicity, where the modified polypeptide is at least 75% identical in amino acid sequence to the corresponding polypeptide of (a) or (b);
- (2) a nucleic acid molecule (N3) comprising a nucleic acid sequence which is anti-sense to the nucleic acid molecule of (1) or N1;
- (3) a nucleic acid molecule (N4) comprising a nucleic acid sequence which encodes a fusion protein comprising a polypeptide encoded by N1 and an additional polypeptide;
- (4) a vaccine comprising at least one first nucleic acid of N1, N2 or N4 and a vaccine vector, where each first nucleic acid is expressed as a polypeptide, the vaccine optionally comprising a second nucleic acid encoding an additional polypeptide which enhances the immune response to the polypeptide expressed by the first nucleic acid;
- (5) a unicellular host transformed with a nucleic acid (N1, N2, N3 or N4) operatively linked to one or more expression control sequences;
 - (6) a nucleic acid **probe** of 5 to 100 nucleotides

 Searcher: Shears 308-4994

which hybridizes under stringent conditions to N1 or N2, or to a homolog or complementary or anti-sense sequence of the nucleic acid molecule;

- (7) a primer of 10 to 40 nucleotides which hybridizes under stringent conditions to N1 or N2, or to a homolog or complementary or anti-sense sequence of the nucleic acid molecule;
 - (8) a polypeptide (P1) encoded by N1, N2 or N4;
- (9) a polypeptide (P2) comprising an amino acid sequence selected from:
 - (a) (III) or (IV);
- (b) an immunogenic fragment comprising at least 12 consecutive amino acids from a polypeptide of (a); and
- (c) a polypeptide of (a) or (b) which has been modified to improve its immunogenicity, where the modified polypeptide is at least 75% identical in amino acid sequence to the corresponding polypeptide of (a) or (b);
- (10) a fusion polypeptide (P3) comprising P1 or P2, and an additional polypeptide;
- (11) a method for producing P1 or P2, comprising culturing the unicellular host of (5);
 - (12) an antibody against P1, P2 or P3;
- (13) a vaccine comprising at least one first polypeptide of P1, P2 or P3, and optionally comprising a second polypeptide which enhances the immune response to the first polypeptide;
- (14) a method of **detecting Chlamydia** infection comprising the step of assaying a body fluid of a mammal to be tested, with a component selected from:
 - (a) N1, N2, N3 or N4;
 - (b) P1, P2 or P3; or
 - (c) the antibody of (12);
- (15) a diagnostic kit comprising a component selected from those defined in the method of (14);
- (16) a method for identifying a polypeptide of P1, P2 or P3 which induces an immune response effective to prevent or lessen the severity of Chlamydia infection in a mammal previously immunized with polypeptide, comprising:
 - (a) immunizing a mouse with the polypeptide; and
- (b) inoculating the immunized mouse with Chlamydia, where the immunized mouse is compared with a non-immunized mouse control to identify the polypeptide; and
 - (17) expression plasmid pCAI640.

ACTIVITY - Antibacterial.

Groups of 7 to 9 week old male Balb/c mice (8 to 10 per group) were immunized intramuscularly (i.m.) plus intranasally (i.n.) with plasmid DNA containing the coding sequence of C. pneumoniae 98 kDa outer membrane protein gene. Saline or the plasmid vector lacking an inserted chlamydial gene was given to groups of control animals.

For i.m. immunization alternate left and right quadriceps were Searcher : Shears 308-4994

injected with 100 micro g of DNA in 50 micro l of phosphate buffered saline (PBS) on three occasions at 0, 3 and 6 weeks. For i.n. immunization, anaesthetized mice aspirated 50 micro l of PBS containing 50 micro g DNA on three occasions at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated i. n. with 5 x 105 IFU (undefined) of C. pneumoniae, strain AR39 in 100 micro l of SPG (7.5 % sucrose, 5 mM glutamate, 12.5 mM phosphate pH 7.5) buffer to test their ability to limit the growth of a sublethal C. pneumoniae challenge.

Lungs were taken from mice at days 5 and 9 post-challenge and immediately homogenized in SPG buffer. Dilutions of the homogenate were assayed for the presence of infectious Chlamydia by inoculation onto monolayers of susceptible cells. The inoculum was centrifuged onto the cells at 3000 rotations per minute (rpm) for 1 hour, then the cells were incubated for three-days at 35 deg. C in the presence of 1 micro-g/ml-cycloheximide. After incubation the monolayers were fixed with formalin and methanol then immunoperoxidase stained for the presence of chlamydial inclusions using convalescent sera from rabbits infected with C. pneumoniae and metal-enhanced DAB (undefined) as a peroxidase substrate.

Mice immunized i.n. and i.m. with pCAI640 had chlamydial lung titers less than 255,000 in 4 of 4 cases at day 5 and less than 423,200 in 4 of 4 cases at day 9 while the range of values for control mice immunized with saline was 227,000-934,200 IFU/lung (mean 685,240) at day 5 and 96,000-494,000 IFU/lung (mean 238,080) at day 9.

MECHANISM OF ACTION - Vaccine.

USE - The nucleic acids, proteins, antibodies and vaccines are useful for preventing or treating Chlamydia infection (claimed). Dwg.0/4

L6 ANSWER 6 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-365623 [31] WPIDS

DOC. NO. NON-CPI: N2000-273563 DOC. NO. CPI: C2000-110485

TITLE: Novel Chlamydia PilG-like protein antigen, used for

vaccination and protection against Chlamydia

infection.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): DUNN, P L; MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S): (CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT: 90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000026376 A1 20000511 (200031) * EN 88

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000010541 A 20000522 (200040)

APPLICATION DETAILS:

PA	TENT NO	KIND	AP	PLICATION	DATE
WO	200002637	76 A1	WO	1999-GB3582	19991029
ΑU	200001054	41 A	AU	2000-10541	19991029

FILING DETAILS:

- PATENT NO KIND PATENT NO

AU 2000010541 A Based on

WO 200026376

PRIORITY APPLN. INFO: US 1999-428589 19991027; US 1998-106071 19981029; US 1999-133202 19990507

AN 2000-365623 [31] WPIDS

AB WO 200026376 A UPAB: 20000630

NOVELTY - A novel Chlamydia pneumoniae PilG- like protein antigen is disclosed.

DETAILED DESCRIPTION - An isolated polynucleotide (I) is new, and is selected from:

- (a) a polynucleotide (PN) having the 1400 base pair(bp) sequence given in the specification, and functional analogs thereof;
- (b) a PN encoding a polypeptide having a sequence that is at least 75% homologous to the 391 amino acid sequence given in the specification, and functional analogs thereof; and
- (c) a PN capable of hybridizing under stringent conditions to the PN of (a).

INDEPENDENT CLAIMS are also include for the following:

- (1) an isolated polypeptide (II) having a sequence that is at least 75% homologous to the 391 amino acid sequence given in the specification, and functional fragments thereof;
- (2) an expression cassette, comprising (I) operably linked to a promoter;
- (3) a expression vector, comprising the expression cassette of (2);
 - (4) a host cell comprising he expression cassette of (2);
- (5) a method for producing a protein comprising the 391 amino acid sequence given in the specification, comprising culturing the host cell of (4) under suitable expression conditions, and recovering the recombinant polypeptide;
 - (6) a vaccine vector (preferably for a human host) comprising Searcher: Shears 308-4994

the expression cassette of (2);

- (7) a method for inducing an immune response in a mammal, comprising administering to the mammal an immunologically effective amount of the vaccine vector of (6);
- (8) a pharmaceutical composition, comprising an immunologically effective amount of (II), optionally further comprising an adjuvant or one or more known Chlamydia antigens;
- (9) a method for inducing an immune response in a mammal, comprising administering to the mammal an immunologically effective amount of the composition of (8);
- (10) a PN probe reagent (e.g. a DNA primer) capable of detecting the presence of Chlamydia in a biological material, comprising a PN that hybridizes with (I) under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample, comprising: (a) obtaining PN from the sample; (b) hybridizing this PN with the probe of (10) under hybridization conditions; and (c) detecting hybridization of the probe with the PN;
- (12) an amplification method for detecting the presence of Chlamydia in a sample, comprising: (a) obtaining PN from the sample; (b) amplifying this PN using one or more primers of (10); and (c) detecting the amplified product;
- (13) a method for detecting the presence of Chlamydia in a sample, comprising contacting the sample with a detecting reagent (e.g. monoclonal antibody) that binds to (II) to form a complex; and detecting the formed complex;
- (14) an affinity chromatography method for substantially purifying (II), comprising: (a) contacting a sample containing the polypeptide with a detecting reagent (e.g. monoclonal antibody) that binds to the polypeptide to form a complex; (b) isolating the formed complex; (c) dissociating the formed complex; and (d) isolating the dissociated complex; and
 - (15) an antibody that immunospecifically binds to (II). ACTIVITY - antigen.

MECHANISM OF ACTION - None given.

USE - The PilG-like protein and polynucleotide are used as vaccines for immunization, to provide protection against Chlamydia infections, especially Chlamydia pneumoniae infections.

ADVANTAGE - An effective vaccine for human Chlamydia pneumoniae infection is not available as yet. The present invention provides polypeptides which may be useful for the development of such as vaccine.

DESCRIPTION OF DRAWING(S) - The figure illustrates protection against Chlamydia pneumoniae infection by pCAI419 following DNA immunization. Individual data points are shown for each animal (follow diamonds) as well as mean and standard deviation for each

group (solid squares).
Dwg.4/4

L6 ANSWER 7 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-365571 [31] WPIDS

DOC. NO. CPI: C2000-110433

TITLE: Novel Chlamydia POMP91B precursor protein antigen,

used for vaccination and protection against

Chlamydia infection.

DERWENT CLASS: B04 D16

INVENTOR(S): DUNN, P L; MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S): (CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT: 90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000026239 A2 20000511 (200031)* EN 97

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000010565 A 20000522 (200040)

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
WO 2000026239 A2	WO 1999-GB3622	19991102
AU 2000010565 A	AU 2000-10565	19991102

FILING DETAILS:

PATENT NO	KIND		PAT	TENT NO
AU 200001056	55 A E	Based on	WO	200026239

PRIORITY APPLN. INFO: US 1999-430723 19991029; US 1998-106590 19981102; US 1999-133071 19990507

AN 2000-365571 [31] WPIDS

AB WO 200026239 A UPAB: 20000630

NOVELTY - A novel **polynucleotide** (I) encodes a Chlamydia pneumoniae POMP91B precursor protein antigen.

DETAILED DESCRIPTION - (I) has a fully defined 3150 bp sequence (given in the specification) or has at least 75% homology to a polynucleotide (PN) encoding the fully defined 973 amino acid sequence (given in the specification).

INDEPENDENT CLAIMS are also include for the following:

- (1) an isolated polypeptide (II) having a sequence with at least 75% homology to a fully defined 973 amino acid sequence (given in the specification);
- (2) an expression cassette, comprising (I) linked to a promoter;
- (3) an expression vector, comprising the expression cassette of (2);
 - (4) a host cell comprising the expression cassette of (2);
- (5) producing (II) comprising culturing the host cell of (4) and recovering the recombinant polypeptide;
 - (6) a vaccine vector comprising the expression cassette of (2);
- (7) a PN probe reagent capable of detecting the presence of Chlamydia in a biological material, comprising a PN that hybridizes with -- (I).
 - (8) detecting the presence of Chlamydia in a sample comprising;
 - (a) obtaining PN from the sample;
 - (b) amplifying or hybridizing the PN with the
 probe in (7); and
 - (c) detecting the hybridized or amplified PN;
 - (9) **detecting** the presence of **Chlamydia** in a sample comprising;
 - (a) contacting the sample with a detection reagent that recognizes (II), forming a complex;
 - (b) detecting the complex; and
 - (10) affinity chromatography purifying (II) comprising;
 - (a) contacting a sample containing (II) with a reagent that binds (II), forming a complex;
 - (b) isolating the complex;
 - (c) dissociating the complex and isolating (II); and
 - (11) an antibody that specifically binds (II).

ACTIVITY - Immunogen; vaccine.

MECHANISM OF ACTION - None given.

USE - The POMP91B precursor protein and **polynucleotide** are used as vaccines for immunization, to provide protection against Chlamydia infections, especially Chlamydia pneumoniae infections. The vaccine vector, the polypeptide and Chlamydia antigens are useful in the preparation of pharmaceutical compositions (claimed). Administration of the vector and pharmaceutical composition are used to produce an immune response in a mammal (claimed).

ADVANTAGE - An effective vaccine for human Chlamydia pneumoniae infection is not available as yet. The present invention provides polypeptides which may be useful for the development of such as vaccine.

DESCRIPTION OF DRAWING(S) - The figure illustrates protection against Chlamydia pneumoniae infection by pCAI632 following DNA immunization. Individual data points are shown for each animal Searcher: Shears 308-4994

(follow diamonds) as well as mean and standard deviation for each group (solid squares). $\mathsf{Dwq.4/4}$

L6 ANSWER 8 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-365569 [31] WPIDS

DOC. NO. CPI:

C2000-110431

TITLE:

Novel Chlamydia 98 kDa putative outer membrane protein antigen, used for vaccination and

protection against Chlamydia infection.

DERWENT CLASS:

B04 D16

INVENTOR(S):

DUNN, P L; MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S):

(CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000026237 A2 20000511 (200031) * EN 93

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000010539 A 20000522 (200040)

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
WO 2000026237 A2	WO 1999-GB3579	19991029
AU 2000010539 A	AU 2000-10539	19991029

FILING DETAILS:

PATENT NO	KIND	PATENT NO

AU 2000010539 A Based on

WO 200026237

PRIORITY APPLN. INFO: US 1999-428122 19991027; US 1998-106070 19981029; US 1999-122066 19990301

AN 2000-365569 [31] WPIDS

AB WO 200026237 A UPAB: 20000630

NOVELTY - A novel Chlamydia pneumoniae 98 kDa putative outer membrane protein antigen is disclosed.

DETAILED DESCRIPTION - An isolated polynucleotide (I) is new, and is selected from:

(a) a polynucleotide (PN) having the 3000 base pair Searcher: Shears 308-4994 (bp) sequence given in the specification, and functional analogs thereof;

- (b) a PN encoding a polypeptide having a sequence that is at least 75% homologous to the 928 amino acid sequence given in the specification, and functional analogs thereof; and
- (c) a PN capable of hybridizing under stringent conditions to the PN of (a).

INDEPENDENT CLAIMS are also include for the following:

- (1) an isolated polypeptide (II) having a sequence that is at least 75% homologous to the 928 amino acid sequence given in the specification, and functional fragments thereof;
- (2) an expression cassette, comprising (I) operably linked to a promoter;
- (3) a expression vector, comprising the expression cassette of (2);
 - (4) a host-cell-comprising he expression cassette of (2);
- (5) a method for producing a protein comprising the 928 amino acid sequence given in the specification, comprising culturing the host cell of (4) under suitable expression conditions, and recovering the recombinant polypeptide;
- (6) a vaccine vector (preferably for a human host) comprising
 the expression cassette of (2);
- (7) a method for inducing an immune response in a mammal, comprising administering to the mammal an immunologically effective amount of the vaccine vector of (6);
- (8) a pharmaceutical composition, comprising an immunologically effective amount of (II), optionally further comprising an adjuvant or one or more known Chlamydia antigens;
- (9) a method for inducing an immune response in a mammal, comprising administering to the mammal an immunologically effective amount of the composition of (8); and
- (10) a PN probe reagent (e.g. a DNA primer) capable of detecting the presence of Chlamydia in a biological material, comprising a PN that hybridizes with (I) under stringent conditions.

ACTIVITY - antigen.

MECHANISM OF ACTION - None given.

USE - The 98 kDa putative outer membrane protein and polynucleotide are used as vaccines for immunization, to provide protection against Chlamydia infections, especially Chlamydia pneumoniae infections.

ADVANTAGE - An effective vaccine for human Chlamydia pneumoniae infection is not available as yet. The present invention provides polypeptides which may be useful for the development of such as vaccine.

DESCRIPTION OF DRAWING(S) - The figure illustrates protection against Chlamydia pneumoniae infection by pCAI396 following DNA immunization. Individual data points are shown for each animal (follow diamonds) as well as mean and standard deviation for each Searcher : Shears 308-4994

group (solid squares). Dwg.4/4

ANSWER 9 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-350743 [30] WPIDS

DOC. NO. NON-CPI:

N2000-262746

DOC. NO. CPI:

C2000-106769

TITLE:

Isolated polynucleotide encoding a

Chlamydia polypeptide useful to treat, diagnose and

prevent disease caused by Chlamydia infection.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

DUNN, P L; MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S):

(CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE , WEEK LA PG

WO 2000024902 A1 20000504 (200030)* EN 101

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU

SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

A 20000515 (200039) AU 9963598

APPLICATION DETAILS:

PAT	TENT NO K	IND	API	PLICATION	DATE
WO	2000024902	A1	WO	1999-GB3571	19991028
ΑU	9963598	A	ΑU	1999-63598	19991028

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9963598	A Based or	wo 200024902

PRIORITY APPLN. INFO: US 1999-427533 19991026; US 1998-106046 19981028; US 1999-132271 19990503

AN 2000-350743 [30] WPIDS

WO 200024902 A UPAB: 20000624 AB

NOVELTY - An isolated polynucleotide (N1) encoding a 98

kDa outer membrane protein of a strain of Chlamydia pneumoniae, is new.

DETAILED DESCRIPTION - An isolated polynucleotide

(N1) has a nucleotide sequence which comprises:

- (a) a defined nucleotide sequence (I) of 3050 base pairs or functional fragments of (I);
- (b) a polynucleotide sequence encoding a polypeptide with a sequence at least 75% homologous to (II) which has a defined protein sequence of 931 amino acids, or functional fragments; or
- (c) a sequence capable of hybridizing under stringent conditions to a sequence comprising (I), or functional fragments. INDEPENDENT CLAIMS are also included for the following:
- (1) an isolated polypeptide (P1) with a sequence at least 75% homologous to (II), or functional fragments of (II);
- (2) a polypeptide P2 comprising P1 linked to a fusion polypeptide;
- (3) an expression cassette comprising N1 operably linked to a promoter;
- (4) an expression vector comprising the expression cassette of
 - (5) a host cell comprising the expression cassette of (3);
- (6) a method of producing a recombinant polypeptide with sequence (II) comprising culturing the host cell of (5) and recovering the polypeptide;
 - (7) a vaccine vector comprising the expression cassette of (3);
- (8) a pharmaceutical composition containing P1 and one or more known Chlamydia antigens;
- (9) a method for inducing an immune response in a mammal comprising administering the vaccine vector of (7) or a composition containing P1 to induce an immune response;
- (10) a polynucleotide probe reagent capable of detecting the presence of Chlamydia in biological material comprising a polynucleotide that hybridizes to N1 under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample comprising:
 - (a) obtaining polynucleotide from the sample;
- (b) hybridizing the obtained polynucleotide with the polynucleotide probe reagent of (10) under conditions allowing hybridization of the probe and the sample; and
 - (c) detecting any hybridization occurring;
- (12) an amplification method for **detecting** the presence of **Chlamydia** in a sample comprising:
 - (a) obtaining polynucleotide from the sample;
- (b) amplifying the polynucleotide using one or more polynucleotide probe reagents of (10); and
 - (c) detecting the amplified polynucleotide;
- (13) a method for **detecting** the presence of **Chlamydia** in a sample comprising contacting the sample with a detecting **reagent** that binds to P1 in the sample and detecting the formed complex;

- (14) an affinity chromatography method for substantially purifying a polypeptide with sequence (II) comprises:
- (a) contacting a sample containing (II) with a detecting reagent that binds to the polypeptide to form a complex;
 - (b) isolating the formed complex;
 - (c) dissociating the formed complex; and
 - (d) isolating the dissociated polypeptide; and
- (15) an antibody that immunospecifically binds P1 or a fragment or derivative of the antibody containing its binding domain.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

Balb/c mice (7-9 weeks old) were immunized intramuscularly and intranasally with plasmid DNA containing the coding sequence of C. pneumoniae 98 kDa outer membrane protein gene. Control animals were given saline or the plasmid vector without the chlamydial gene. Theintramuscular immunization comprised 100 micro g DNA in 50 micro 1 phosphate buffered saline (PBS) at 0, 3 and 6 weeks and the intranasal immunization comprised 50 micro g DNA in 50 micro l PBS at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated intranasally with 5x105 inclusion forming units (IFU) of C. pneumoniae, strain AR39 in 100 micro 1 SPG (sucrose, glutamate, phosphate) buffer. Lungs were taken from the mice at day 9 post challenge and homogenized in SPG buffer, the homogenate was assayed for the presence of infectious chlamydia by inoculation onto monolayers of susceptible cells After incubation the monolayers were fixed and immunoperoxidase stained for the presence of chlamydial inclusions using convalescent sera from rabbits infected with C. pneumoniae and metal-enhanced DAB (not defined) as a peroxidase substrate. Mice immunized with the plasmid containing the 98 kDa outer membrane protein gene had chlamydial lung titers less than 300000 IFU/lung at day 5 and less than 144000 at day 9 compared to 685240 IFU/lung at day 5 and 238080 at day 9 for the control mice immunized with saline.

USE - The polynucleotides and polypeptides can be used as a vaccine for humans to treat or prevent disease caused by Chlamydia infection and P1, N1 or an antibody to P1 can be used to diagnose a Chlamydia infection. Dwg.0/4

L6 ANSWER 10 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-350742 [30] WPIDS

DOC. NO. NON-CPI:

N2000-262745

DOC. NO. CPI:

C2000-106768

TITLE:

Isolated polynucleotide encoding a

Chlamydia polypeptide useful to treat, diagnose and

prevent disease caused by Chlamydia infection.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

DUNN, P L; MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S):

(CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

90

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000024901 A1 20000504 (200030)* EN 88

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 9963593 A 20000515 (200039)

APPLICATION DETAILS:

SICATION DETAILS:		
		한 하는 것 않아는 무슨 하는 것 같아요. 는 모양을 된 하는 것 .
PATENT NO KIND	APPLICATION	DATE
WO 2000024901 A1	WO 1999-GB3565	19991028
AU 9963593 A	AU 1999-63593	19991028

FILING DETAILS:

PATENT NO KIND PATENT NO

AU 9963593 A Based on WO 200024901

PRIORITY APPLN. INFO: US 1999-427501 19991026; US 1998-106037 19981028; US 1999-154658 19990920

AN 2000-350742 [30] WPIDS

AB WO 200024901 A UPAB: 20000624

NOVELTY - An isolated **polynucleotide** (N1) encoding a lorf2 protein of a strain of Chlamydia pneumoniae, is new.

DETAILED DESCRIPTION - An isolated polynucleotide

- (N1) has a nucleotide sequence which comprises:
- (a) a defined nucleotide sequence (I) of 1550 base pairs or functional fragments of (I);
- (b) a nucleotide sequence encoding a polypeptide with a sequence at least 75% homologous to (II) which has a defined protein sequence of 422 amino acids, or functional fragments; or
- (c) a sequence capable of hybridizing under stringent conditions to a sequence comprising (I), or functional fragments.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polypeptide (P1) with a sequence at least 75% homologous to (II), or functional fragments of (II);
- (2) a polypeptide P2 comprising P1 linked to a fusion polypeptide;
- (3) an expression cassette comprising N1 operably linked to a promoter;

- (4) an expression vector comprising the expression cassette of
 (3);
 - (5) a host cell comprising the expression cassette of (3);
- (6) a method of producing a recombinant polypeptide with sequence (II) comprising culturing the host cell of (5) and recovering the polypeptide;
 - (7) a vaccine vector comprising the expression cassette of (3);
- (8) a pharmaceutical composition containing P1 and one or more known Chlamydia antigens;
- (9) a method for inducing an immune response in a mammal comprising administering the vaccine vector of (7) or a composition containing P1 to induce an immune response;
- (10) a polynucleotide probe reagent capable of detecting the presence of Chlamydia in-biological material comprising a polynucleotide that hybridizes to N1 under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample comprising:
 - (a) obtaining polynucleotide from the sample;
- (b) hybridizing the obtained polynucleotide
 with the polynucleotide probe reagent
 of (10) under conditions allowing hybridization of the
 probe and the sample; and
 - (c) detecting any hybridization occurring;
- (12) an amplification method for **detecting** the presence of **Chlamydia** in a sample comprising:
 - (a) obtaining polynucleotide from the sample;
- (b) amplifying the polynucleotide using one or more polynucleotide probe reagents of (10); and
 - (c) detecting the amplified polynucleotide;
- (13) a method for **detecting** the presence of **Chlamydia** in a sample comprising contacting the sample with a detecting **reagent** that binds to P1 in the sample and detecting the formed complex;
- (14) an affinity chromatography method for substantially purifying a polypeptide with sequence (II) comprises:
- (a) contacting a sample containing (II) with a detecting reagent that binds to the polypeptide to form a complex;
 - (b) isolating the formed complex;
 - (c) dissociating the formed complex; and
 - (d) isolating the dissociated polypeptide; and
- (15) an antibody that immunospecifically binds P1 or a fragment or derivative of the antibody containing its binding domain.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

Balb/c mice (7-9 weeks old) were immunized intramuscularly and intranasally with plasmid DNA containing the coding sequence of C. pneumoniae lorf2 gene. Control animals were given saline or the Searcher : Shears 308-4994

plasmid vector without the chlamydial gene. The intramuscular immunization comprised 100 micro q DNA in 50 micro l phosphate buffered saline (PBS) at 0, 3 and 6 weeks and the intranasal immunization comprised 50 micro g DNA in 50 micro l PBS at 0, 3 and 6 weeks. At week 8, immunized mice were inoculated intranasally with 5x105 inclusion forming units (IFU) of C. pneumoniae, strain AR39 in 100 micro l SPG (sucrose, glutamate, phosphate) buffer. Lungs were taken from the mice at day 9 post challenge and homogenized in SPG buffer, the homogenate was assayed for the presence of infectious chlamydia by inoculation onto monolayers of susceptible cells After incubation the monolayers were fixed and immunoperoxidase stained for the presence of chlamydial inclusions using convalescent sera from rabbits infected with C. pneumoniae and metal-enhanced DAB (not defined) as a peroxidase substrate. Mice immunized with the plasmid containing the lorf2 gene had an average chlamydial lung_titer_of-11050 IFU/lung compared to 111783 IFU/lung for the control mice immunized with saline.

USE - The polynucleotides and polypeptides can be used as a vaccine for humans to treat or prevent disease caused by Chlamydia infection and P1, N1 or an antibody to P1 can be used to diagnose a Chlamydia infection. Dwg.0/4

ANSWER 11 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-224703 [19]

DOC. NO. NON-CPI:

N2000-168305

DOC. NO. CPI:

C2000-068764

TITLE:

Novel antigens and corresponding DNA molecules that can be used to prevent, treat and diagnose disease

caused by Chlamydia infection in mammals,

WPIDS

especially humans.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S): PATENT ASSIGNEE(S): MURDIN, A D; OOMEN, R P (CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

88

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000011183 A2 20000302 (200019) * EN 201

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM

EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD

SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9952973 A 20000314 (200031)

APPLICATION DETAILS:

PATENT NO K	IND	APPLICATION	DATE
WO 2000011183	A2	WO 1999-IB1449	19990818
AU 9952973	A	AU 1999-52973	19990818

FILING DETAILS:

PATENT NO KIND PATENT NO
AU 9952973 A Based on WO 200011183

PRIORITY APPLN. INFO: US 1999-376770 19990817; US 1998-97187 19980820; US 1998-97188 19980820; US 1998-97190 19980820; US 1998-97190

19980820; US 1998-97195 - - 19980820; US 1998-97197
19980820; US 1998-97191 19980827

AN 2000-224703 [19] WPIDS

AB WO 200011183 A UPAB: 20000419

NOVELTY - Isolated Chlamydia pneumoniae polypeptides (PP) encoded by one of the amino acid sequences of 147-970 amino acids (aa) (I)-(VIII) are new. All sequences are fully disclosed in the specification.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) a polynucleotide (PN) encoding a (PP) having a sequence that is at least 75% homologous to and/or a functional fragment of the (aa) selected from (I)-(VIII), where the (PN) comprises one of the nucleotide sequences of 650-3200 base pairs (bp) (IX)-(XVI);
- (2) (PP) encoded by one of the amino acid sequences of 147-970 amino acids (aa) (I)-(VIII) linked to a fusion polypeptide;
- (3) an expression cassette comprising one of the nucleotide sequences of 650-3200 base pairs (bp) (IX)-(XVI) operably linked to a promoter;
 - (4) an expression vector comprising (3);
 - (5) a host cell comprising (3);
 - (6) producing a recombinant (PP), comprising:
 - (a) culturing (5), to allow expression of the (PP); and
 - (b) recovering the recombinant (PP);
 - (7) a vaccine vector comprising the (3);
 - (8) a (PN) probe reagent capable of

detecting the presence of **Chlamydia** in biological material, comprising a (PN) that **hybridizes** to the (PN) that comprises one of the nucleotide sequences of 650-3200 base pairs (bp) (IX)-(XVI);

- (a) obtaining (PN) from the sample;
- (b) hybridizing the (PN) of with (8); and
- (c) detecting the hybridization of (8) with a (PN) in the sample;
- (10) an amplification method for detecting the presence of Chalmydia in sample, comprising:
- (a) see (9) (a);
 - (b) amplifying the (PN) using one or more (8); and
 - (c) detecting the amplified (PP) (sic);
- (11) detecting the presence of Chlamydia in a sample comprising:
- (a) contacting the sample with a detecting reagent that binds to a (PP) to form a complex (C), the (PP) being selected from the following: (CPN 100)111, 224, 230, 231, 232, 235, 394, and 395; and _ _ _ - _ -

- __(b)_detecting-(C);
- -----(12) an affinity chromatography method for substantially purifying a Chlamydia antigen comprising:
 - (a) contacting a sample containing the Chalmydia antigen with a detecting reagent that binds to a (PP) to form a (C), the (PP) being selected from the (PP) in (11) (a);
 - (b) isolating (C);
 - (c) dissociating (C); and
 - (d) isolating the dissociated Chlamydia antigen; and
 - (13) an antibody (ab) immunospecific for (PP) encoded by one of the amino acid sequences of 147-970 amino acids (aa) (I)-(VIII), or a fragment or derivative of the (ab) containing the binding domain of the (ab).

ACTIVITY - Antibacterial; anti-pneumonia; antitussive; antiasthmatic. No biological data given.

MECHANISM OF ACTION - Vaccine. No biological data given.

USE - Isolated Chlamydia polypeptides (PP) may be used to prevent, treat and detect the presence of Chlamydia infection and/or the presence of Chlamydia in a sample. The (PP) encoded by one of the amino acid sequences of 147-970 amino acids (aa) (I)-(VIII) may be used to induce an immune response in a mammal. The vaccine vector comprising a polynucleotide (PN) where the (PN) comprises one of the nucleotide sequences of 650-3200 base pairs (bp) (IX)-(XVI) given in the specification is used to induce an immune response in a mammal. The (PN) probe is capable of detecting the presence of Chlamydia in biological material. (All claimed). The antibody may also be used therapeutically to treat and/or prevent a Chlamydia infection. The above compositions may also be used for veterinary treatment, for example, to treat and/or prevent Chlamydia infections in cats and dogs.

ADVANTAGE - There is increasing evidence that Chlamydia pneumoniae may be linked to other diseases/conditions including chronic bronchitis, asthma and sinusitis and can lead to hospitalization in patients with underlying illness, as well as Shears Searcher : 308-4994

non-respiratory diseases. Several studies have shown a correlation of previous infections with C.pneumoniae and heart attacks, coronary artery and carotid artery disease. (See, Fong et al., (1997) Journal of Clinical Microbiology 35:48). Therefore, the vaccine disclosed may have further indirect clinical applications and concomitant advantages, for example, reducing the likelihood of heart disease while preventing C.pneumoniae infection (No biological data is given). Antibiotic resistance is increasingly common and the vaccine preparation provides an alternative method of treatment. Further, exposure to other Chlamydia.spp affords no cross-protection to C.pneumoniae infection.

Dwg.0/16

ANSWER 12 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD L6

2000-195303 [17] WPIDS ACCESSION NUMBER:

-N2000-144462 DOC._NO._NON-CPI:--

C2000-060593 - DOC NO CPI:

Chlamydia pneumoniae antigens used for immunization TITLE:

and protection against Chlamydia diseases.

DERWENT CLASS:

B04 D16 S03 DUNN, P L; MURDIN, A D; OOMEN, R P INVENTOR(S):

PATENT ASSIGNEE(S): (CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT: 86

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000006743 A2 20000210 (200017) * EN 52

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW NL OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES

FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK

LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9947934 A 20000221 (200029)

APPLICATION DETAILS:

PATENT NO KI	IND	APPLICATION	DATE
WO 2000006743	A2	WO 1999-IB1333	19990727
AU 9947934	A	AU 1999-47934	19990727

FILING DETAILS:

PATENT NO KIND PATENT NO AU 9947934 A Based on WO 200006743

PRIORITY APPLN. INFO: US 1999-360434 19990726; US 1998-94203 19980727; US 1999-122045 19990301

AN 2000-195303 [17] WPIDS

AB WO 200006743 A UPAB: 20000405

NOVELTY - Chlamydia pneumoniae antigens, and their corresponding **polynucleotides**, are new. These polypeptides are found in the bacterial membrane structure and its external vicinity, in the inclusion membrane and its external vicinity, and are released into the cytoplasm of the infected cell.

DETAILED DESCRIPTION - An isolated polynucleotide

- (I), is new, and is selected from:
 - (a) a 961 bp sequence given in the specification;
- (b) a polynucleotide encoding a polypeptide which is at least 75% homologous to a 265 amino acid sequence given in the specification; and
- under stringent conditions to the 961 bp sequence given in the specification.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polypeptide that is at least 75% homologous to the 237 amino acid sequence given in the specification;
- (2) an expression cassette, comprising (I) operably linked to a promoter;
- (3) an expression vector comprising the expression cassette of
 (2);
 - (4) a host cell comprising the expression cassette of (2);
- (5) a method for producing a recombinant CPN100314 polypeptide, comprising culturing the host cell of (4);
- (6) a vaccine vector, comprising the expression cassette of
 (2);
- (7) a pharmaceutical composition, comprising the vaccine vector
 of (6);
- (8) a pharmaceutical composition, comprising the polypeptide of (1), and further comprising one or more known Chlamydia antigens;
- (9) a method for inducing an immune response in a mammal, comprising administering to the mammal an immunologically effective amount of the vaccine vector of (6) or the pharmaceutical composition of (8);
- (10) a polynucleotide probe reagent
 (especially a DNA primer) capable of detecting
 the presence of Chlamydia in biological material,
 comprising a polynucleotide that hybridizes to
 (I) under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample, comprising obtaining polynucleotide from the sample, hybridizing the polynucleotide with the probe of (10) and (c) detecting hybridization;
 - (12) an amplification method for **detecting** the

 Searcher: Shears 308-4994

presence of Chlamydia in a sample, comprising obtaining polynucleotide from the sample, amplifying the polynucleotide using one or more of the reagent probes of (10) and (c) detecting the amplified polynucleotide;

(13) a method for detecting the presence of Chlamydia in a sample, comprising contacting the sample with a detecting reagent (especially an antibody) that binds to CPN100314 polypeptide to form a complex;

(14) an affinity chromatography method for purifying a CPN100314 polypeptide, comprising contacting a sample containing a CPN100314 polypeptide with a detecting reagent (especially an antibody) that binds to CPN100314 polypeptide to form a complex, isolating the formed complex, dissociating the formed complex and isolating the dissociated CPN100314 polypeptide; and

(15) an antibody that immunospecifically binds the polypeptide of (1).

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

USE - The Chlamydia pneumoniae polynucleotides and polypeptides can be used in vaccination methods for preventing and treating Chlamydia infection (e.g. infections caused by C. trachomatis, C. psittaci, C. pneumoniae or C. pecorum). The polynucleotides can be used to produce the polypeptides recombinantly, in the construction of vaccine vectors, as a vaccine agent, and in the construction of an attenuated Chlamydia strain. The polypeptides are also useful as vaccine agents, and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia, and upper respiratory tract infections such as bronchitis and sinusitis. Dwg.0/4

ANSWER 13 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-205466 [18] WPIDS

DOC. NO. NON-CPI:

N2000-152901

DOC. NO. CPI:

C2000-063307

TITLE:

Chlamydia pneumoniae antigens used for immunization

and protection against Chlamydia diseases.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S):

(CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000006742 A2 20000210 (200018)* EN 48

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 9947932 A 20000221 (200029)

APPLICATION DETAILS:

PAT	ENT NO K	IND	API	PLICATION	DATE
WO	2000006742	A2	WO	1999-IB1331	19990727
ΑU	9947932	A	ΑU	1999-47932	19990727

FILING DETAILS:

PATENT NO KIND ____ PATENT NO ____

AU 9947932 A Based on

WO 200006742

PRIORITY APPLN. INFO: US 1999-361443 19990726; US 1998-94195 19980727

AN 2000-205466 [18] WPIDS

AB WO 200006742 A UPAB: 20000412

NOVELTY - Chlamydia pneumoniae antigens, and their corresponding polynucleotides (I), are new.

DETAILED DESCRIPTION - Chlamydia pneumoniae antigen polynucleotides (I) are selected from:

- (a) a defined 1401 bp sequence encoding a 467 amino acid protein (given in the specification); and
- (b) a polynucleotide capable of hybridizing under stringent conditions to the 1401 bp sequence.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polypeptide that is at least 75% homologous to the 450 amino acid sequence given in the specification;
- (2) an expression cassette, comprising (I) operably linked to a promoter;
- (3) an expression vector comprising the expression cassette of (2);
 - (4) a host cell comprising the expression cassette of (2);
- (5) a method for producing a recombinant CPN100605 polypeptide, comprising culturing the host cell of (4);
- (6) a vaccine vector, comprising the expression cassette of
 (2);
- (7) a pharmaceutical composition, comprising the vaccine vector
 of (6);
- (8) a pharmaceutical composition, comprising an immunologically effective amount of the polypeptide of (1), and further comprising one or more known Chlamydia antigens;
 - (9) a method for inducing an immune response in a mammal, Searcher: Shears 308-4994

comprising administering the vaccine vector of (6) or the pharmaceutical composition of (8);

- (10) a polynucleotide probe reagent (especially a DNA primer) capable of detecting the presence of Chlamydia in biological material, comprising a polynucleotide that hybridizes to (I) under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample, comprising:
 - (a) obtaining a polynucleotide from the sample;
- (b) hybridizing the polynucleotide with the probe of (10); and
 - (c) detecting hybridization;
- (12) an amplification method for detecting the presence of Chlamydia in a sample, comprising obtaining polynucleotide from the sample, amplifying the polynucleotide using one or more of the reagent probes of (10) and detecting the amplified polynucleotide;
- (13) a method for **detecting** the presence of **Chlamydia** in a sample, comprising contacting the sample with a detecting **reagent** (especially an antibody) that binds to CPN100605 polypeptide to form a complex, and detecting the formed complex;
- (14) an affinity chromatography method for purifying a CPN100605 polypeptide, comprising contacting a sample containing a CPN100605 polypeptide with a detecting reagent (especially an antibody) that binds to CPN100605 polypeptide to form a complex, isolating the formed complex, dissociating the formed complex, and isolating the dissociated CPN100605 polypeptide; and
- (15) an antibody that immunospecifically binds the polypeptide of (1).

ACTIVITY - Antibacterial; antiinflammatory. MECHANISM OF ACTION - Vaccine.

USE - The Chlamydia pneumoniae polynucleotides and polypeptides can be used in vaccination methods for preventing and treating Chlamydia infection (e.g. infections caused by C. trachomatis, C. psittaci, C. pneumoniae or C. pecorum). The polynucleotides can be used to produce the polypeptides recombinantly, in the construction of vaccine vectors, as a vaccine agent, and in the construction of an attenuated Chlamydia strain. The polypeptides are also useful as vaccine agents, and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia, and upper respiratory tract infections such as bronchitis and sinusitis.

L6 ANSWER 14 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD ACCESSION NUMBER: 2000-195302 [17] WPIDS

Searcher: Shears 308-4994

DOC. NO. CPI:

C2000-060592

TITLE:

Novel polynucleotides and Chlamydia

pneumoniae outer membrane protein encoded by them for use as vaccines in treating and diagnosing

chlamydial infections.

DERWENT CLASS:

B04 D16

INVENTOR(S):

DUNN, P L; MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S):

(CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

86

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000006741 Al 20000210 (200017)* EN 55

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM_GR_IE_IT_KE_LS_LU-MC-

MW NL OA PT SD SE SL SZ UG ZW ----

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9947931 A 20000221 (200029)

APPLICATION DETAILS:

PAT	TENT NO K	CIND	API	PLICATION	DATE
					
WO	2000006741	. A1	WO	1999-IB1330	19990727
ΑU	9947931	A	ΑU	1999-47931	19990727

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9947931	A Based	on	WO 200006741

PRIORITY APPLN. INFO: US 1999-361440 19990726; US 1998-94192 19980727; US 1999-122044 19990301

AN 2000-195302 [17] WPIDS

AB WO 200006741 A UPAB: 20000405

NOVELTY - An isolated **polynucleotide** (I) encoding Chlamydia pneumoniae outer membrane protein (mip or CPN100501) comprising a 960 base pair sequence or encoding a 258 residue amino acid sequence (II), both fully defined in the specification, or a **polynucleotide** capable **hybridizing** to the 960 bp sequence and their functional fragments, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated polypeptide (II) having at least 75% homology to a 249 residue amino acid sequence, fully defined in the Searcher: Shears 308-4994

specification, or its functional fragment;

- (2) an expression cassette comprising (I);
- (3) an expression vector (V) and a host cell comprising (2);
- (4) preparation of recombinant CPN100501 polypeptide, comprising culturing the cells of (3) and recovering the polypeptide;
 - (5) a vaccine vector (VV) comprising (2);
 - (6) a pharmaceutical composition (C) comprising (II) or (VV);
- (7) a method for inducing an immune response in a mammal, comprising administering (VV) to the mammal;
- (8) a polynucleotide probe reagent
 (III) capable of detecting Chlamydia, which
 hybridizes to (I);
- (9) a method for detecting the presence of Chlamydia in a sample, comprising contacting the sample with a detection reagent which binds to CPN100501 polypeptide; and detecting the complex formed;
- (10) an affinity chromatographic method of purifying CPN100501 polypeptide, comprising contacting a sample containing CPN100501 polypeptide with a detecting reagent which binds CPN100501, isolating and dissociating the complex formed, and isolating and dissociating the polypeptide; and
 - (11) an antibody (A) binding to (II).

ACTIVITY - Antibiotic. Balb/c mice (7-9 weeks old) were immunized intramuscularly with 100 mu g of plasmid DNA encoding C. pneumoniae mip protein and saline or plasmid vector were given to control animals. After 8 weeks the immunized mice were inoculated with 5 multiply 105 infection forming units (IFU) of C. pneumoniae. Lung from mice were dissected, homogenized and assayed for the presence of infectious Chlamydia by inoculating onto monolayers of susceptible cells. Results showed a reduction in chlamydial lung titers (4600) compared to control (11811) and results further indicated that these protein molecules are capable of giving a more protective effect than other proteins (protein dagA).

MECHANISM OF ACTION - Vaccine.

USE - (I) is used for **detecting Chlamydia** by **hybridizing** or amplifying the sample with the **probe** (III) (claimed). (VV) and (C) are used for inducing an immune response in a mammal (claimed) to prevent/treat chlamydial infections particularly infections caused by Chlamydia pneumoniae. Dwg.0/4

L6 ANSWER 15 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 2000-205465 [18] WPIDS

DOC. NO. NON-CPI: N2000

N2000-152900

DOC. NO. CPI:

C2000-063306

TITLE:

Novel Chlamydia pneumoniae antigens used for immunization and protection against Chlamydia diseases.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S): (CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

86

PATENT INFORMATION:

PATENT NO KIND DATE WEEK _____

WO 2000006740 A1 20000210 (200018)* EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG

SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

-AU-9947930 A 20000221 (200029)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 200000674	0 A1	WO 1999-IB1329	19990727
AU 9947930	Α	AU 1999-47930	19990727

FILING DETAILS:

PATENT NO	KIND	PATENT NO	
			. _
AIT 9947930	7 Raged	NO 20006740	

PRIORITY APPLN. INFO: US 1999-361040 19990726; US 1998-94191

19980727

2000-205465 [18] WPIDS AN

WO 200006740 A UPAB: 20000412 AΒ

> NOVELTY - Novel Chlamydia pneumoniae antigens, and their corresponding polynucleotides, are disclosed. These polypeptides are found in the bacterial membrane structure and its external vicinity, in the inclusion membrane and its external vicinity, and are released into the cytoplasm of the infected cell.

DETAILED DESCRIPTION - An isolated polynucleotide

- (I), is new, and is selected from:
- (a) the 1600 bp sequence given in the specification, and functional fragments thereof;
- (b) a polynucleotide encoding a polypeptide which is at least 75% homologous to the 459 amino acid sequence given in the specification, and functional fragments thereof;
- (c) a polynucleotide capable of hybridizing under stringent conditions to the 1600 bp sequence given in the specification, and functional fragments thereof.

INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polypeptide that is at least 75% homologous to the 421 amino acid sequence given in the specification, and functional fragment thereof;
- (2) an expression cassette, comprising (I) operably linked to a promoter;
- (3) an expression vector comprising the expression cassette of
 (2);
 - (4) a host cell comprising the expression cassette of (2);
- (5) a method for producing a recombinant CPN100149 polypeptide, comprising culturing the host cell of (4) under conditions that allow the expression of the polypeptide; and recovering the recombinant polypeptide;
- (6) a vaccine vector, comprising the expression cassette of (2);
- (7) a pharmaceutical composition, comprising an immunologically effective amount of the vaccine vector of (6);
- (8) a pharmaceutical composition, comprising an immunologically effective amount of the polypeptide of (1), and further comprising an adjuvant, and further comprising one or more known Chlamydia antigens;
- (9) a method for inducing an immune response in a mammal, comprising administering to the mammal an immunologically effective amount of the vaccine vector of (6) OR the pharmaceutical composition of (8), wherein the administration induces an immune response;
- (10) a polynucleotide probe reagent
 (especially a DNA primer) capable of detecting
 the presence of Chlamydia in biological material,
 comprising a polynucleotide that hybridizes to
 (I) under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample, comprising:
 - (a) obtaining polynucleotide from the sample;
- (b) hybridizing the polynucleotide with the probe of (10) under hybridization conditions; and
- (c) detecting hybridization of the probe to
 the polynucleotide;
- (12) an amplification method for **detecting** the presence of **Chlamydia** in a sample, comprising:
 - (a) obtaining polynucleotide from the sample;
- (b) amplifying the **polynucleotide** using one or more of the **reagent probes** of (10); and
 - (c) detecting the amplified polynucleotide;
- (13) a method for **detecting** the presence of **Chlamydia** in a sample, comprising contacting the sample with a detecting **reagent** (especially an antibody) that binds to CPN100149 polypeptide to form a complex, and detecting the formed complex;

- (14) an affinity chromatography method for substantially purifying a CPN100149 polypeptide, comprising:
- (a) contacting a sample containing a CPN100149 polypeptide with a detecting reagent (especially an antibody) that binds to CPN100149 polypeptide to form a complex;
 - (b) isolating the formed complex;
 - (c) dissociating the formed complex; and
 - (d) isolating the dissociated CPN100149 polypeptide;
- (15) an antibody that immunospecifically binds the polypeptide of (1), or a fragment or derivative of the antibody containing the binding domain.

ACTIVITY - Antigenic.

MECHANISM OF ACTION - Vaccine.

USE - The Chlamydia pneumoniae polynucleotides and polypeptides of the invention can be used in vaccination methods for preventing—and treating Chlamydia infection (e.g. infections caused by C. trachomatis, C. psittaci, C. pneumoniae or C. pecorum). The polynucleotides can be used to produce the polypeptides recombinantly, in the construction of vaccine vectors, as a vaccine agent, and in the construction of an attenuated Chlamydia strain that can over-express a polypeptide of the invention, or express it in a modified form. The polypeptides are also useful as vaccine agents, and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia, and upper respiratory tract infections such as bronchitis and sinusitis.

ADVANTAGE - Chlamydia pneumoniae causes a number serious of infections in humans. As yet, a protective vaccine against C. pneumoniae infection in humans does not exist. The present invention provides antigens which may form the basis of such a vaccine. Dwg.0/2

L6 ANSWER 16 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

2000-183129 [16] WPIDS

DOC. NO. NON-CPI:
DOC. NO. CPI:

N2000-134996 C2000-057541

TITLE:

Novel Chlamydia pneumoniae antigens used for immunization and protection against Chlamydia

diseases.

DERWENT CLASS:

B04 D16 S03

INVENTOR(S):

MURDIN, A D; OOMEN, R P

PATENT ASSIGNEE(S):

(CONN-N) CONNAUGHT LAB LTD

COUNTRY COUNT:

86

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2000006739 A2 20000210 (200016)* EN 45

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC Searcher : Shears 308-4994

MW NL OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9947929 A 20000221 (200029)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 200000673	9 A2	WO 1999-IB1328	19990727
AU 9947929	A	AU 1999-47929	19990727

FILING DETAILS:

PATENT NO KIND PATENT NO
AU 9947929 A Based on WO 200006739

PRIORITY APPLN. INFO: US 1999-360707 19990726; US 1998-94198 19980727

AN 2000-183129 [16] WPIDS

AB WO 200006739 A UPAB: 20000330

NOVELTY - An isolated **polynucleotide** (I), selected from a 1169 bp sequence, and functional fragments of it, a **polynucleotide** encoding a polypeptide which is at least 75% homologous to a 363 residue amino acid, and functional fragments of it, corresponding to Chlamydia pneumoniae antigen its gene, and a **polynucleotide** which **hybridizes** to the 1169 bp sequence. All sequences fully defined in the specification.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) an isolated polypeptide that is at least 75% homologous to the 363 amino acid sequence, and functional fragments of it;
- (2) an expression cassette, comprising (I) operably linked to a promoter;
- (3) an expression vector comprising the expression cassette of (2);
 - (4) a host cell comprising the expression cassette of (2);
- (5) a method for producing a recombinant CPN100202 polypeptide, comprising culturing the host cell of (4) under conditions that allow the expression of the polypeptide, and recovering it;
- (6) a vaccine vector, comprising the expression cassette of
 (2);
- (7) a pharmaceutical composition, comprising an immunologically effective amount of the vaccine vector of (6);
- (8) a pharmaceutical composition, comprising an immunologically effective amount of the polypeptide of (1), and further comprising

 Searcher: Shears 308-4994

an adjuvant, and one or more known Chlamydia antigens;

- (9) a method for inducing an immune response in a mammal, comprising administering the vaccine vector of (6) or the pharmaceutical composition of (8);
- (10) a polynucleotide probe reagent capable of detecting the presence of Chlamydia in biological material, comprising a polynucleotide that hybridizes to (I) under stringent conditions;
- (11) a hybridization method for detecting the presence of Chlamydia in a sample, comprising obtaining polynucleotide from the sample, hybridizing the polynucleotide with the probe of (10) under hybridization conditions, and detecting hybridization;
- (12) an amplification method for detecting the presence of Chlamydia in a sample, comprising obtaining polynucleotide from the sample, amplifying the polynucleotide using one or more of the reagent probes of (10), and detecting the amplified polynucleotide;
- (13) a method for **detecting** the presence of **Chlamydia** in a sample, comprising contacting the sample with a detecting **reagent** that binds to CPN100202 polypeptide, and detecting the formed complex;
- (14) an affinity chromatography method for substantially purifying a CPN100202 polypeptide, comprising contacting a sample with a detecting **reagent** that binds to CPN100202 polypeptide, and isolating the formed complex, dissociating it and isolating the CPN100202 polypeptide; and
- (15) an antibody that immunospecifically binds the polypeptide of (1), or a fragment or derivative of the antibody containing the binding domain.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

USE - The Chlamydia pneumoniae polynucleotides and polypeptides of the invention can be used in vaccination methods for preventing and treating Chlamydia infections caused by C. trachomatis, C. psittaci, C. pneumoniae or C. pecorum The polynucleotides can be used to produce the polypeptides recombinantly, in the construction of vaccine vectors, as a vaccine agent, and in the construction of an attenuated Chlamydia strain that can over-express a polypeptide of the invention, or express it in a modified form. The polypeptides are also useful as vaccine agents, and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia, and upper respiratory tract infections such as bronchitis and sinusitis.

ADVANTAGE - Chlamydia pneumoniae causes a number serious of infections in humans. As yet, a protective vaccine against C.

Searcher: Shears 308-4994

pneumoniae infection in humans does not exist. The present invention provides antigens which may form the basis of such a vaccine. Dwg.0/2

ANSWER 17 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1999-371125 [31] WPIDS

DOC. NO. NON-CPI:

N1999-276699

DOC. NO. CPI:

C1999-109591

TITLE:

Genome sequence of Chlamydia trachomatis.

DERWENT CLASS:

B04 D16 P14 S03

INVENTOR(S):

FLETCHER, L D; GRIFFAIS, R; HOISETH, S K; METCALF,

B J; PEEK, J A; SANKARAN, B; ZAGURSKY, R J

PATENT ASSIGNEE(S): (GEST) GENSET

COUNTRY COUNT:

PATENT INFORMATION:

പ്രമായത്തെ നിവസ്ക്യായത്തെ ഇന്ത്രയായ ഇന്ത്രയായ ഒരു ഇന്ത്ര വിവയ വിവയം വിവയം വിവയം വിവയം അതിയോട് ഉവര് വിവയം PATENT NO KIND DATE WEEK LA PG _____

WO 9928475 A2 19990610 (199931)* EN 290

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT UA UG US UZ VN YU ZW

AU 9912545 A 19990616 (199945)

A2 20000906 (200044) EN EP 1032676

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

BR 9814912 A 20001003 (200053)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9928475	A2	WO 1998-IB19	39 19981127
AU 9912545	A	AU 1999-1254	5 19981127
EP 1032676	A2	EP 1998-9558	32 19981127
		WO 1998-IB19	39 19981127
BR 9814912	A	BR 1998-1491	.2 19981127
		WO 1998-IB19	39 19981127

FILING DETAILS:

PAT	CENT NO	KIND			PAT	ENT NO	_
AU	9912545	A	Based	on	WO	9928475	_
EР	1032676	A2	Based	on	WO	9928475	
BR	9814912	Α	Based	on	WO	9928475	

PRIORITY APPLN. INFO: US 1998-107077 19981104; FR 1997-15041 19971128; FR 1997-16034 19971217

AN 1999-371125 [31] WPIDS

AB WO 9928475 A UPAB: 19990806

NOVELTY - The genome sequence and open reading frames (ORF) of Chlamydia trachomatis.

DETAILED DESCRIPTION - An isolated **polynucleotide** (I) having a nucleotide sequence of a Chlamydia trachomatis genome, comprising:

- (a) the nucleotide sequence given as SEQ ID No. 1 in the spec (Note: While the sequence is claimed the sequence is not given in the specification)
- (b) the nucleotide sequence contained within the Chlamydia trachomatis genomic DNA in ECACC Deposit No. 98112618;
- (c) the nucleotide sequence contained in a clone insert in ECACC Deposit No. 98112617;
- (d) a nucleotide sequence exhibiting at least 99.9% identity with the sequence of SEQ ID No. 1; or
- (e) a nucleotide sequence exhibiting at least 80% homology to SEQ ID No. 1.
- (f) or sequences that hybridize to sequences as in
 (a)-(c) under high or intermediate stringency.

INDEPENDENT CLAIMS are included for:

- (1) an isolated **polynucleotide** having a nucleotide sequence of an open reading frame (ORF) of a Chlamydia trachomatis genome, comprising:
- (a) a nucleotide sequence chosen from one of ORF2 to ORF 1197 (The ORF sequences are mentioned but are not given in the specification, the ORF sequences are derived from SEQ ID No. 1);
- (b) a nucleotide sequence exhibiting at least 99.9% identity with one of ORF2 to ORF 1197; or
- (c) a nucleotide sequence exhibiting at least 80% homology to one of ORF2 to ORF 1197.
 - (d) or sequences that hybridize to sequences as in
- (a)-(c) under high or intermediate stringency.
- (2) a **polynucleotide** encoding a fusion protein, comprising one of ORF2 to ORF 1197 of Claim 4, 5, or 6 ligated in frame to a **polynucleotide** encoding a heterologous polypeptide.
- (3) a recombinant vector that contains the
 polynucleotide (I) or as in (1) or (2);
- (4) a genetically engineered host cell that contains the polynucleotide (I) or as in (1) or (2);
- (5) a polypeptide encoded by the polynucleotide as in
 (1) or (2);
- (6) an antibody that immunospecifically binds to the fusion protein as in (2);
- (7) a method for **detection**/identification of **Chlamydia** trachomatis in a biological sample:

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(a) using poynucleotides (I) or as in (1) or (2) as
primers in a PCR protocol or as probes in a
hybridization assay;
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- (b) using an antibody as in (6) or polypeptide as in (5) in an immunoassay;
- (8) a DNA chip containing an array of **polynucleotides** comprising at least one of the **polynucleotides** (I) or as in (1) or (2);
- (9) a protein chip containing an array of polypeptides comprising at least one of the polypeptides as in (5);
- (10) screening assays for detecting whether test compound bind to **polynucleotides** (I) or as in (1) or (2) or polypeptides as in (5);
- (11) a kit comprising a container containing an isolated polynucleotide (I) or as in (1) or (2);
- (12) a kit comprising a container containing an antibody that immunospecifically binds to the polypeptide as in (5).

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

USE - The polypeptide as in (5) can be used as a vaccine against Chlamydia trachomatis (claimed).

The detection method can be used to detect Chlamydia trachomatis infection.

Chlamydia trachomatis is responsible for a large number of diseases:

- (1) eye diseases such as
- (a) conventional trachoma;
- (b) nonendemic trachoma;
- (c) paratrachoma; and
- (d) inclusion conjunctivitis;
- (2) genital diseases such as:
- (a) nongonococcal uretritis;
- (b) epidymitis;
- (c) cervicitis;
- (d) salpingitis;
 - (e) perihepatitis;
 - (f) bartholinitis; and
 - (g) pneumopathy in breast feeding infants;
 - (3) venereal lymphogranulomatosis.

Dwg.0/3

L6 ANSWER 18 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1999-357842 [30] WPIDS

DOC. NO. NON-CPI: N1999-266397 DOC. NO. CPI: C1999-105918

TITLE: Genome sequence of Chlamydia pneumoniae.

DERWENT CLASS: B04 D16 P14 S03

INVENTOR(S): FLETCHER, L D; GRIFFAIS, R; HOISETH, S K; METCALF,

B J; PEEK, J A; SANKARAN, B; ZAGURSKY, R J Searcher: Shears 308-4994 PATENT ASSIGNEE(S):

(GEST) GENSET

COUNTRY COUNT:

83

PATENT INFORMATION:

PATENT N	O KIND	DATE	WEEK	LA	PG

WO 9927105 A2 19990603 (199930) * EN

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC

MW NL OA PT SD SE SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI

GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT

LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL

TJ TM TR TT UA UG US UZ VN YU ZW

AU 9911702 A 19990615 (199944-)

EP 1032674 A2 20000906 (200044) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

BR 9814878 A 20001003 (200053)

APPLICATION DETAILS:

PF	TENT NO	KIND	APPLICATION	DATE
WC	9927105	A2	WO 1998-IB1890	19981120
Αl	9911702	А	AU 1999-11702	19981120
E	1032674	A2	EP 1998-954662	19981120
			WO 1998-IB1890	19981120
BF	9814878	Α	BR 1998-14878	19981120
			WO 1998-IB1890	19981120

FILING DETAILS:

PAT	TENT NO	KIND			PAT	TENT NO	
AU	9911702	A	Based	on	wo	9927105	•
EР	1032674	A2	Based	on	WO	9927105	
BR	9814878	Α	Based	on	WO	9927105	

PRIORITY APPLN. INFO: US 1998-107078 19981104; FR 1997-14673 19971121

AN 1999-357842 [30] WPIDS

AM 1999 337042 [30] MI100

AB WO 9927105 A UPAB: 19990802

NOVELTY - Genome sequence of Chlamydia pneumoniae and open reading frames obtained by analysis of the sequence.

DETAILED DESCRIPTION - An isolated polynucleotide (I) having a nucleotide sequence of a Chlamydia pneumoniae genome, comprising:

- (a) the nucleotide sequence (I) 1230025 bp sequence given in the specification;
 - (b) the nucleotide sequence contained within the Chlamydia Searcher: Shears 308-4994

pneumoniae genomic DNA in ATCC Deposit No (deposit number left blank in the specification).

- (c) the nucleotide sequence contained in a clone insert in ATCC Deposit No (no deposit number left blank in the specification);
- (d) a nucleotide sequence exhibiting at least 99.9% identity with the 1230025 bp sequence;
- (e) a nucleotide sequence exhibiting at least 80% homology to the 1230025 bp sequence;
- (f) sequences that hybridize under high or
 intermediatte stringency with sequences as in (a)-(e);
 INDEPENDENT CLAIMS are included for:
- (1) an isolated **polynucleotide** having a nucleotide sequence of an open reading frame (ORF) of a Chlamydia pneumoniae genome, comprising:
- (a) a nucleotide sequence chosen from one of ORF2 to ORF 1297-(sequences given in the specification).
- (b) a nucleotide sequence exhibiting at least 99.9% identity with one of ORF2 to ORF 1297; or
- (c) a nucleotide sequence exhibiting at least 80% homology to one of ORF2 to ORF 1297;
 - (d) sequences that hybridize to sequences as in
- (a)-(c) under high or intermediatte specificity;

- (2) a polynucleotide encoding a fusion protein, comprising one of ORF2 to ORF1297 as in (1) ligated in frame to a polynucleotide encoding a heterologous polypeptide;
- (3) a recombinant vector that contains the
 polynucleotide (I) or as in (1) or (2);
- (4) a genetically engineered host cell that contains the
 polynucleotide (I) or as in (1) or (2);
 - (5) a method of producing a polypeptide;
- (6) a polypeptide encoded by the sequence (I) or as in (1) or
 (2);
- (7) an antibody that immunospecifically binds to the polypeptide as in (6);
- (8) a method for the detection and/or identification of Chlamydia pneumoniae in a biological sample, comprising:
- (1) using the sequence (I) or as in (1) or (2) as primers in a PCR protocol;
- (2) using the antibody as in (7) to detect the proteins of Chlamydia pneumoniae;
- (9) a DNA chip containing an array of **polynucleotides** comprising at least one of the **polynucleotides** (I) or as in (1) or (2);
- (10) a protein chip containing an array of polypeptides comprising at least one of the polypeptides as in (6);
- (11) screening assays to detect whether compounds bind to the polynucleotides (I), or as in (1) or (2), or to polypeptides as in (6);

(12) a kit containing the polynucleotides (I) or as in (1) or (2); and

(13) a kit containing the antibody as in (7).

ACTIVITY - Anitbacterial.

MECHANISM OF ACTION - None given.

USE - The polypeptides as in (7) can be used in an immunogenic composition as a vaccine, the vaccine is especially against Chlamydia pneumonia (claimed). The vector as in

(3) can also be used as an immunogenic composition, especially where the vector directs the expression of a neutralizing epitope of Chlamydia pneumoniae (claimed). Chlamydia pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis Dwg.0/3

L6 ANSWER 19 OF 21 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER:

1998-567652 [48] WPIDS

CROSS REFERENCE:

1998-376887 [32]; 2000-223163 [18]

DOC. NO. CPI:

C1998-170552

TITLE:

Probe for detecting

Chlamydia trachomatis - comprises polynucleotide fragment that

hybridises to major outer membrane protein

DNA or RNA.

DERWENT CLASS:

B04 D16

INVENTOR(S): PATENT ASSIGNEE(S): AGABIAN, N; KUO, C; MULLENBACH, G; STEPHENS, R

(CHIR) CHIRON CORP; (WASH-N) WASHINGTON RES FOUND

COUNTRY COUNT:

PATENT INFORMATION:

PAT	CENT	NO	KIND	DATE	WEEK	LA	PG
					- -		
US	5821	055	Α	19981013	(199848)*		15

APPLICATION DETAILS:

PATENT NO	KIND	AP	PLICATION	DATE
US 5821055	A CIP of Cont of Cont of Cont of	us us	1985-692001 1986-818523 1991-691639 1993-144095	19850114 19860113 19910425 19931028
		US	1995-468451	19950606

PRIORITY APPLN. INFO: US 1986-818523 19860113; US 1985-692001

19850114; US 1991-691639 19910425; US

1993-144095 19931028; US 1995-468451 19950606

AN 1998-567652 [48] WPIDS

CR 1998-376887 [32]; 2000-223163 [18]

AB US 5821055 A UPAB: 20000419

Probe for detecting Chlamydia

trachomatis comprises a **polynucleotide** fragment that specifically **hybridises** to a DNA or RNA sequence encoding C. trachomatis 38-45 kDa. major outer membrane protein (MOMP).

Dwq.0/2

L6 ANSWER 20 OF 21 TOXLIT

ACCESSION NUMBER: 1994:33240 TOXLIT DOCUMENT NUMBER: CA-120-070885N

DOCUMENT NUMBER: CA-120-070885N

TITLE: Chlamydiae probes for use in solution phase

sandwich hybridization assays.

AUTHOR: Sanchez-Pescador R; Besemer DJ; Urdea MS

SOURCE: (1993). PCT Int. Appl. PATENT NO. 93-13221-07/08/93

(Chiron Corp.).

PUB. COUNTRY: United States

DOCUMENT TYPE: Patent
FILE SEGMENT: CA
LANGUAGE: English
OTHER SOURCE: CA 120:70885

ENTRY MONTH: 199405

AB The title probes, i.e. amplifier probe and

capture probe, comprise a first segment with nucleotide sequence substantially complementary to a segment of Chlamydiae plasmid DNA and a second segment with nucleotide sequence substantially complementary to an oligonucleotide multimer or an oligonucleotide bound to a solid phase, resp. Thus, a comb-type polynucleotide having 15 branch sites and side chain extensions having 3 labeled probe binding sites was synthesized and used as a labeled multimer. The amplifier and capture probes are hybridized with sample, the formed complexes are captured by oligonucleotide-bound solid phase, and the captured complexes are hybridized with the oligonucleotide multimer and complementary labeled oligonucleotide for Chlamydiae detection.

L6 ANSWER 21 OF 21 TOXLIT

ACCESSION NUMBER: 1993:50212 TOXLIT DOCUMENT NUMBER: CA-118-185109P

TITLE: Novel amplification method for polynucleotide

assays.

AUTHOR: Dattagupta N; Sullivan EC

SOURCE: (1993). Eur. Pat. Appl. PATENT NO. 530526 03/10/93

(Miles Inc.).

PUB. COUNTRY: United States

DOCUMENT TYPE: Patent FILE SEGMENT: CA

LANGUAGE:

English

OTHER SOURCE:

CA 118:185109

ENTRY MONTH:

199306

AΒ A nucleic acid sequence is detected in a sample by (1) treating the sample under hybridization conditions with an oligonucleotide that lacks a recognition site for enzyme digestion, (2) extending the hybridization product by adding polymerase and nucleoside triphosphates to create, on the oligonucleotide strand, a recognition site for enzyme digestion, (3) hybridizing the oligonucleotide strand to a labeled probe which is immobilized or immobilizable and contains a recognition site for enzyme digestion that is completely or partially complementary to the recognition site for enzyme digestion on the oligonucleotide strand, (4) digesting the hybridization product with restriction endonuclease, and (5) detecting the sepd. label which is released in soln. -A kit-for detection of a nucleic acid sequence comprises a labeled probe, an oligonucleotide sequence for extension, and a restriction endonuclease. Thus, Chlamydia DNA was

probe, an oligonucleotide sequence for extension, and a restriction endonuclease. Thus, Chlamydia DNA was detected by use of a synthetic 22-mer oligonucleotide representing a portion of the gene for the major outer membrane protein of C. trachomatis, which was 5' end labeled with 32P using T4 polynucleotide kinase and 3' end labeled with biotin by thermocycling 30 times in the presence of biotin-11-dUTP, Taq polymerase, and a DNA sample. The amplified product was immobilized on streptavidin-coated magnetic particles, hybridized with a single-stranded complementary oligonucleotide contg. a restriction site for AluI, digested with AluI, and released radioactivity was detd. in the supernatant, after magnetic particle sepn., by denaturing gel electrophoresis. Extension of the labeled probe occurred in a specific manner, limited by the complementarity of the hybridizing sequence.

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(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO, TOXLIT, TOXLINE, PHIC, PHIN' ENTERED AT 12:13:43 ON 22 NOV 2000)
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-Author (5)
L7
            181 S MURDIN A?/AU
L8
            161 S (COMEN R? OR OOMEN R?)/AU
L9
           2187 S DUNN P?/AU
L10
             33 S L7 AND L8 AND L9
             55 S L7 AND (L8 OR L9)
L11
L12
             33 S L8 AND L9
L13
             36 S (L7 OR L8 OR L9) AND L1
             64 S L10 OR L11 OR L12 OR L13
L14
             34 DUP REM L14 (30 DUPLICATES REMOVED)
L15
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L15 ANSWER 1 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1

ACCESSION NUMBER:

2000:666879 CAPLUS

DOCUMENT NUMBER:

133:251269

TITLE:

Chlamydia pneumoniae antigenic membrane protein

and DNA sequences, and their diagnostic and

therapeutic uses

CODEN: PIXXD2

INVENTOR (S):

Murdin, Andrew D.; Oomen, Raymond

P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S):

Aventis Pasteur Limited, Can.

SOURCE:

PCT Int. Appl., 77 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000055326	A1	20000921	WO 2000-CA240	20000309

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, GA, CH, CN, CR,

CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,

SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,

VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 1999-123966 19990312

The invention provides protein and DNA sequences of a 60kDa cysteine-rich antigenic membrane protein of a strain of Chlamydia pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically C. pneumoniae, employing a vector contg. a Chlamydia antigenic membrane protein gene and a promoter to effect expression of the 60kDa cysteine-rich membrane protein gene in the host.

REFERENCE COUNT:

REFERENCE(S):

- (1) Abbott Lab; WO 9746709 A 1997
- (3) Wagels, G; JOURNAL OF CLINICAL MICROBIOLOGY 1994, V32(11), P2820 CAPLUS
- (4) Watson, M; MICROBIOLOGY (READING) 1994, V140(8), P2003 CAPLUS
- (5) Watson, M; NUCLEIC ACIDS RESEARCH 1990, V18(17), P5299 CAPLUS
- (6) Watson, M; NUCLEIC ACIDS RESEARCH 1990, V18(17), P5300 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 2

ACCESSION NUMBER:

2000:646146 CAPLUS

DOCUMENT NUMBER:

133:221591

TITLE:

Chlamydia pneumoniae antigenic membrane protein

Shears 308-4994 Searcher :

and corresponding DNA fragments and their

diagnostic and therapeutic uses

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond

P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S):

Aventis Pasteur Limited, Can.

SOURCE:

PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053764	A1	20000914	WO 2000-CA239	2.0.0.0.0.3.0.9

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 1999-123968 19990312

AB The invention provides protein and DNA sequences of a 9kDa cysteine-rich antigenic membrane protein of a strain of Chlamydia pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically C. pneumoniae, employing a vector contg. a Chlamydia antigenic membrane protein gene and a promoter to effect expression of the 9kDa cysteine-rich membrane protein gene in the host.

REFERENCE COUNT:

1

REFERENCE(S):

(1) Abbott Lab; WO 9746709 A 1997

L15 ANSWER 3 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 3

ACCESSION NUMBER:

2000:457095 CAPLUS

DOCUMENT NUMBER:

133:88218

TITLE:

Chlamydia antigens and corresponding DNA

fragments and uses thereof

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond

P.; Wang, Joe

PATENT ASSIGNEE(S):

Connaught Laboratories Ltd., Can.

SOURCE: PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

APPLICATION NO. DATE

PATENT INFORMATION:

PATENT NO.

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                                        _____
    WO 2000039158
                    A1
                          20000706
                                       WO 1999-CA1230
                                                       19991223
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
            ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                      --- US-1998-113280 --- 19981223-
PRIORITY APPLN. INFO :-
              US 1998-113281 19981223
                                        US 1998-113282
                                                       19981223
                                        US 1998-113283
                                                       19981223
                                        US 1998-113284
                                                       19981223
                                        US 1998-113285 19981223
                                        US 1998-113385 19981223
                                        US 1998-114050
                                                       19981228
                                        US 1998-114056
                                                       19981228
                                        US 1998-114057
                                                       19981228
                                        US 1998-114058
                                                       19981228
                                        US 1998-114059
                                                        19981228
                                        US 1998-114061
                                                       19981228
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KIND DATE

The present invention provides purified and isolated polynucleotide mols. that encode Chlamydia polypeptides which can be used in methods to prevent, treat, and diagnose Chlamydia infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100686 RY 54 (SEQ ID Nos: 1 and 14), CPN100696 RY-55 (SEQ ID Nos: 2 and 15), CPN100709 RY-57 (SEQ ID Nos: 3 and 16), CPN100710 RY-58 (SEQ ID Nos: 4 and 17), CPN100711 RY-59 (SEQ ID Nos: 5 and 18), CPN100877 RY-61 (SEQ ID Nos: 6 and 19), CPN100325 RY-62 (SEQ ID Nos: 7 and 20), CPN100368 RY-63 (SEQ ID Nos:8 and 21), CPN100624 RY-64 (SEQ ID Nos:9 and 22), CPN100633 RY-65 (SEQ ID Nos:10 and 23), CPN100985 RY-66 (SEQ ID Nos:11 and 24), CPN100987 RY-67 (SEQ ID Nos:12 and 25) and CPN100988 RY-68 (SEQ ID Nos:13 and 26).

REFERENCE COUNT:

REFERENCE(S):

8

- (4) Kalman; NATURE GENETICS 1999, V21, P385 CAPLUS
- (5) Melgosa, M; INFECTION AND IMMUNITY 1991, V59(6), P2195 CAPLUS
- (6) Melgosa, M; INFECTION AND IMMUNITY 1994, V62(3), P880 CAPLUS
- (7) Stephens; SCIENCE 1998, V282, P754 CAPLUS
- (8) Watson, M; NUCLEIC ACIDS RESEARCH 1990, Searcher : Shears 308-4994

V18(17), P5299 CAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT

DUPLICATE 4

L15 ANSWER 4 OF 34 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

2000:457094 CAPLUS

DOCUMENT NUMBER:

133:88217

TITLE:

Chlamydia antigens and corresponding DNA

seems access on the second contents

fragments and uses thereof

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond

P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S):

Connaught Laboratories Ltd., Can.

SOURCE:

PCT Int. Appl., 81 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----_____ -----WO 1999-CA1224 WO 2000039157 A1 20000706 19991222 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 1998-114060 19981228 US 1999-123967 19990312 US 1999-141271 19990630

AB The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia , specifically C. pneumoniae , employing a vector contg. a nucleotide sequence encoding an ATP/ADP translocase of a strain of Chlamydia pneumoniae and a promoter to effect expression of the ATP/ADP translocase gene in the host. Modifications are possible within the scope of this invention.

REFERENCE COUNT:

REFERENCE(S):

- (1) Griffais, R; WO 9927105 A 1999
- (2) Hatch, T; JOURNAL OF BACTERIOLOGY 1982, V150(2), P662 CAPLUS
- (3) Kalman; NATURE GENETICS 1999, V21, P385
- (4) Stephens; SCIENCE 1998, V282, P754 CAPLUS
- (5) Tjaden; J BACTERIOL 1999, V181(4), P1196 Searcher : Shears 308-4994

CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 5

ACCESSION NUMBER:

2000:384447 CAPLUS

DOCUMENT NUMBER:

133:13445

TITLE:

Chlamydia pneumoniae antigens and corresponding

DNA fragments

INVENTOR (S):

Murdin, Andrew D.; Oomen, Raymond

P.; Wang, Joe

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 174 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1 ---

PATENT INFORMATION:

PATENT	NO.	KIND DATE				APPLICATION NO. DATE						
WO 2000	032794	A2	WO 1999-CA1147 19991201									
W:	AE, AL,	AM, AT	AU, AZ	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
	CU, CZ,	DE, DK	DM, EE	ĖS,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
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	LU, LV,	MA, MD	MG, MK	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,
	SD, SE,	SG, SI,	SK, SL	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,
	VN, YU,	ZA, ZW,	AM, AZ	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM		
RW:	GH, GM,	KE, LS,	MW, SD	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
	DE, DK,	ES, FI,	FR, GB	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,
	BJ, CF,	CG, CI,	CM, GA	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
PRIORITY APP	LN. INFO	.:			U	S 19	98-1	1033	9	1998	1201	
					U	S 19	98-1	1034	0	1998	1201	
					U	S 19	98-1	1042	7	1998	1201	
					U:	S 19	98-1	1042	В	1998	1201	
					U	S 19:	98-1	1043	В	1998:	1201	
AP The pro	cent inv	ention r	rovides	fina	nur	ifia	d and	4 10	~1 a+.	64		

The present invention provides five purified and isolated AB polynucleotide mols. that encode Chlamydia pneumoniae polypeptides which can be used in methods to prevent, treat and diagnose Chlamydia infection. In one form of the invention, the polynucleotide mols. are selected from DNA that encode polypeptides CPN100634, CPN100635, CPN100638, CPN100639, and CPN100708.

L15 ANSWER 6 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 6

ACCESSION NUMBER:

2000:384432 CAPLUS

DOCUMENT NUMBER:

133:29606

TITLE:

A Chlamydia pneumoniae 98kDa outer membrane

protein and gene sequences, and uses for

immunization and diagnosis

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond Searcher :

Shears 308-4994

P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----WO 2000032784 **A1** 20000608 WO 1999-CA1148 19991201 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO.: US 1998-110439 19981201

AB The invention provides sequences of a Chlamydia pneumoniae 98kDa putative outer membrane protein (OMP) CPN100640 and corresponding DNA which can be used in methods to prevent, treat, and diagnose Chlamydia infections in mammals, including humans. In particular, a vaccine vector encoding OMP or an OMP/signal peptide fusion protein is provided as is its use in immunization against Chlamydia. Probes/primers and antibodies for diagnostic use are also provided. BALB/C mice vaccinated with an expression vector for OMP antigen showed increased resistance to challenge with C. pneumoniae.

REFERENCE COUNT:

9

REFERENCE(S):

- (1) Griffais, R; WO 9927105 A 1999
- (2) Halme, S; IMMUNOLOGY 1997, V45(4), P378 CAPLUS
- (3) Hitachi Chemical Co Ltd; EP 0784059 A 1997

US 1999-132272

- (4) Kalman; EMBL DATABASE 1999
- (6) Knudsen; INFECTION AND IMMUNITY 1999, V67(1), P375 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 7 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 7

19990503

ACCESSION NUMBER:

2000:314840 CAPLUS

DOCUMENT NUMBER:

132:333384

TITLE:

Chlamydia PilG-like antigens and corresponding genes and uses for diagnosis, preventing, and

treatment of Chlamydia infection

INVENTOR(S):

Murdin, Andrew David; Oomen,

Raymond Peter; Dunn, Pamela Lesley

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	NO.	KIN		DATE			A	PPLI	CATI	ON NO	ο.	DATE		
							_							
WO 2000	026376	A1	. :	2000	0511		W	199	99-GI	B358:	2	1999	1029	
₩:	AE, AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
	CU, CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
44.40	ID, IL,	IN	IS.	JP,	KE,	_KG,_	<u>_KP</u> ,_	_KR.,_	_KZ-,-	LC,	LK.,	LR,	LS,	LT,
	LU, LV,	-MA',-	MD,	MG,	MK,	−MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,
	SD, SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,
	VN, YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM		
RW:	GH, GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
	DE, DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,
	BJ, CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
PRIORITY APP	LN. INFO	.:					U	3 199	98-10	0607	1	1998	1029	
							US	3 199	99-13	3320	2	19990	0507	
							US	3 199	99-42	28589	Э	1999	1027	

AB The present invention provides a gene of Chlamydia pneumoniae encoding PilG-like proteins found in the bacterial inclusion membrane structure. PilG-like genes and proteins can be used in methods to prevent, treat, and diagnose Chlamydia infection in mammals including humans. BALB/C mice vaccinated with an expression vector for PilG-like protein showed increased resistance to challenge with C. pneumoniae. Vaccinated mice showed slower rates of growth of C. pneumoniae in lungs. Modifications are possible within the scope of this invention.

REFERENCE COUNT:

REFERENCE(S):

- (1) Brunham; WO 9802546 A 1998
- (2) Griffais, R; WO 9927105 A 1999
- (3) Hitachi Chemical Co Ltd; EP 0784059 A 1997
- (4) Kalman; EMBL Database Acc No AE01662 1999
- (5) Stephens; EMBL Database Acc No AE001327 1998

308-4994

L15 ANSWER 8 OF 34 CAPLUS COPYRIGHT 2000 ACS **DUPLICATE 8**

ACCESSION NUMBER:

2000:314720 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

132:346613

TITLE;

Chlamydia antigens and corresponding DNA

fragments and uses thereof

Murdin, Andrew David; Oomen,

Raymond Peter; Dunn, Pamela Lesley Connaught Laboratories Limited, Can.

PATENT ASSIGNEE(S):

PCT Int. Appl., 97 pp. Searcher Shears

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT 1	NO.		KI	ND	DATE			A.	PPLI	CATI	ON NO	ο.	DATE		
									_							
WO	2000	0262	39	A	2	2000	0511		W	0 19	99-G	B362	2	1999	1102	
WO	2000	0262	39	A	3	2000	0810									
	W:	ΑE,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
		CU,	CZ,	DE,	DK,	DM,	ΕĒ,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,
		ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LŢ,
		ŁU,	LV,	MA,	MD,	MG,	MK,	MN,	ΜŴ,	ΜX,	NO,	NZ,	PL,	PT,	RO,	RU,
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	_ ===	VN,	YU,	ZA,	ZW.,	-AM,-	AZ,-	BY,	-KG,-	KZ,	MD,	RU,	TJ,	$\mathbf{T}\mathbf{M}^{=}$	es 27 - 1	a
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	ŞΖ,	TZ,	ŪĠ,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
PRIORITY	APP	LN.	INFO	.:					U	3 19	98-1	06590)	1998:	1102	
									US	3 19	99-1	3307	l	19990	507	

The present invention provides a method of nucleic acid, including DNA, immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically C. pneumoniae, employing a vector, contg. a nucleotide sequence encoding an POMP91B precursor protein of a strain of Chlamydia pneumoniae and a promoter to effect expression of the POMP91B precursor gene in the host. Also provided are fusion proteins and vaccines contg. POMP91B precursor protein, POMP91B-specific polyclonal and monoclonal antibodies, polynucleotide probes and primers, and affinity chromatog. method for purifying the polypeptide.

L15 ANSWER 9 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 9

19991029

ACCESSION NUMBER:

2000:314718 CAPLUS

DOCUMENT NUMBER:

132:333380

TITLE:

Sequences of a Chlamydia pneumoniae 98kDa putative outer membrane protein, and uses thereof in diagnostic and therapeutic

US 1999-430723

applications

INVENTOR (S):

Murdin, Andrew David; Oomen,

Raymond Peter; Dunn, Pamela Lesley

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

PCT Int. Appl., 93 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
              KIND DATE
                                  APPLICATION NO. DATE
_____
                                   -----
WO 2000026237
                A2
                     20000511
                                   WO 1999-GB3579
                                                   19991029
WO 2000026237
                     20000921
                A3
   W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
       CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
       ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
       LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
       SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
       VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
   RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
       DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
       BJ, CF, CG, CI, CM, GA, GN, GW, ML, MP, NE, SN, TD, TG
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PREORITY APPLN: INFO.: US 1998-106070 19981029 US 1999-122066 19990301 US 1999-428122 19991027

AB The invention provides sequences of a Chlamydia pneumoniae 98kDa putative outer membrane protein (OMP) which can be used in methods to prevent, treat, and diagnose Chlamydia infections. In particular, a vaccine vector encoding OMP or an OMP/signal peptide fusion protein is provided as is its use in immunization against Chlamydia. Probes/primers for diagnostic use are also provided.

L15 ANSWER 10 OF 34 CAPLUS COPYRIGHT 2000 ACS **DUPLICATE 10**

ACCESSION NUMBER:

2000:291251 CAPLUS

DOCUMENT NUMBER:

132:307251

TITLE:

Chlamydia pneumoniae 98-kDa outer membrane protein and corresponding DNA and use for

vaccine immunization

INVENTOR(S):

Murdin, Andrew David; Oomen,

Raymond Peter; Dunn, Pamela Lesley

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 101 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KI	ND I	DATE			A	PPLI	CATI	ои ис	ο.	DATE		
	-						- 		_							
WO 2000024902			02	A1 20000504				WO 1999-GB3571 199910					1028			
	W:	ΑE,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,
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		ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,
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		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,
					:	Sear	cher	:	:	Shear	rs	308	-499	4		

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VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                           20000515
                                          AU 1999-63598
                                                           19991028
     AU 9963598
                      A1
PRIORITY APPLN. INFO.:
                                          US 1998-106046
                                                           19981028
                                          US 1999-132271
                                                           19990503
                                          US 1999-427533
                                                           19991026
                                          WO 1999-GB3571
                                                           19991028
    The present invention provides a method of nucleic acid, including
AB
    DNA, immunization of a host, including humans, against disease
     caused by infection by a strain of Chlamydia, specifically C.
    pneumoniae, employing a vector, contg. a nucleotide sequence
    encoding a 98-kDa outer membrane protein of a strain of Chlamydia
    pneumoniae and a promoter to effect expression of the gene in the
    host. Modifications are possible within the scope of this
     invention.
REFERENCE COUNT:
                         10
                         (1) Christiansen, G; SCANDINAVIAN JOURNAL OF
REFERENCE(S):
                             INFECTIOUS DISEASES 1997, SUPPL, 104, P5
                         (2) Griffais, R; WO 9927105 A 1999
                         (3) Halme, S; SCANDINAVIAN JOURNAL OF IMMUNOLOGY
                             1997, V45(4), P378 CAPLUS
                         (4) Hatichi Chemical Co Ltd; EP 0784059 A 1997
                         (9) Stephens, R; SCIENCE 1998, V282 (5389), P754
                             CAPLUS
                         ALL CITATIONS AVAILABLE IN THE RE FORMAT
L15 ANSWER 11 OF 34 CAPLUS COPYRIGHT 2000 ACS
                                                      DUPLICATE 11
ACCESSION NUMBER:
                         2000:291249 CAPLUS
DOCUMENT NUMBER:
                        132:307250
TITLE:
                        Chlamydia pneumoniae gene lorf2 antigen and
                         corresponding DNA and use for vaccine
                         immunization
                        Murdin, Andrew David; Oomen,
INVENTOR(S):
                        Raymond Peter; Dunn, Pamela Lesley
PATENT ASSIGNEE(S):
                        Connaught Laboratories Limited, Can.
SOURCE:
                        PCT Int. Appl., 88 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                     KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
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                           -----
    WO 2000024901
                     A1
                           20000504
                                          WO 1999-GB3565
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        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
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CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

Searcher :

Shears 308-4994

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ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      A1 20000515
                                          AU 1999-63593
     AU 9963593
                                                            19991028
PRIORITY APPLN. INFO.:
                                           US 1998-106037
                                                            19981028
                                           US 1999-154658
                                                            19990920
                                           US 1999-427501
                                                            19991026
                                           WO 1999-GB3565
                                                            19991028
AΒ
     The present invention provides a method of nucleic acid, including
    DNA, immunization of a host, including humans, against disease
     caused by infection by a strain of Chlamydia, specifically C.
    pneumoniae, employing a vector, contg. a nucleotide sequence
    encoding a lorf2 protein of a strain of Chlamydia pneumoniae and a
    promoter to effect expression of the lorf2 gene in the host.
    Modifications are possible within the scope of this invention.
REFERENCE COUNT:
REFERENCE(S):
                         (1) Abbott Lab; WO 9746709 A 1997
                         (2) Griffais, R; WO 9927105 A 1999
                         (3) Kalman; EMBL DATABASE ACC NO: AE001654 1999
                         (4) Perez, M; AMERICAN SOCIETY FOR MICROBIOLOGY
                             1994, V62(3), P880
                         (5) Stephens; http://www.ncbi.nlm.nih.gov:80/...
                             ?ui 1998
                         ALL CITATIONS AVAILABLE IN THE RE FORMAT
L15 ANSWER 12 OF 34 CAPLUS COPYRIGHT 2000 ACS
                                                       DUPLICATE 12
ACCESSION NUMBER:
                         2000:291072 CAPLUS
DOCUMENT NUMBER:
                         132:307249
TITLE:
                         Chlamydia antigens and corresponding DNA
                         fragments and their uses for diagnosis and
                         treatment of Chlamydia infection
                        Murdin, Andrew D.; Oomen, Raymond
INVENTOR (S):
                         P.; Wang, Joe
PATENT ASSIGNEE(S):
                         Connaught Laboratories Limited, Can.
                         PCT Int. Appl., 226 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                     KIND
                           DATE
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    WO 2000024765
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                                                            19991028
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
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CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,

Searcher :

Shears 308-4994

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ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
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            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF,
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PRIORITY APPLN. INFO.:
                                          US 1998-106034
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                                          US 1998-106073
                                                           19981029
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                                                           19981029
                                          US_1998-106087---19981029
 US 1998-106587 19981102
                                          US 1998-106588
                                                           19981102
                                          US 1998-106589
                                                           19981102
                                          US 1998-107034
                                                           19981102
                                          US 1998-107035
                                                           19981102
AB
     The present invention provides purified and isolated polynucleotide
    mols. that encode 13 Chlamydia pneumoniae polypeptides which can be
     used in methods to prevent, treat, and diagnose Chlamydia infection.
     The nucleotide and deduced amino acid sequences of the 13 genes and
    proteins are provided.
L15 ANSWER 13 OF 34 CAPLUS COPYRIGHT 2000 ACS
                                                      DUPLICATE 13
ACCESSION NUMBER:
                        2000:145036 CAPLUS
DOCUMENT NUMBER:
                        132:176659
TITLE:
                        Chlamydia pneumoniae antigens and corresponding
                        DNA fragments and their diagnostic and
                        therapeutic uses
                        Murdin, Andrew D.; Oomen, Raymond
INVENTOR (S):
                        Connaught Laboratories Limited, Can.
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 203 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
    WO 2000011183
                      A2
                           20000302
                                          WO 1999-IB1449
                                                           19990818
    WO 2000011183
                           20000608
                      Α3
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
            CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
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ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

Searcher :

Shears

308-4994

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LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
            SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
            ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 9952973
                     A1
                          20000314
                                        AU 1999-52973
                                                         19990818
PRIORITY APPLN. INFO.:
                                        US 1998-97187
                                                         19980820
                                        US 1998-97188
                                                         19980820
                                        US 1998-97189
                                                         19980820
                                        US 1998-97190
                                                         19980820
                                        US 1998-97195
                                                         19980820
                                        US 1998-97196
                                                         19980820
                                        US 1998-97197
                                                         19980820
                                        US_1998-97191-19980827
        US 1999-376770 19990817
                                        WO 1999-IB1449
```

In the Chlamydia pneumoniae genome, 8 open reading frames encoding ΑB chlamydial polypeptides are provided. These polypeptides include polypeptides permanently found in the bacterial membrane structure, polypeptides that are present in the external vicinity of the bacterial membrane, polypeptides permanently found in the inclusion membrane structure, polypeptides that are present in the external vicinity of the inclusion membrane, and polypeptides that are released into the cytoplasm of the infected cell. These polypeptides can be used in vaccination methods for preventing and treating Chlamydia infection. Thus, the present invention provides a method of nucleic acid immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia pneumoniae, employing a vector contg. a nucleotide sequence encoding any of the following polypeptides: CPN 100111, CPN 100224, CPN 100230, CPN 100231, CPN 100232, CPN 100235, CPN 100394, CPN 100395 and a promoter to effect expression of any of the polypeptides in the host.

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L15 ANSWER 14 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 14
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ACCESSION NUMBER:

2000:145034 CAPLUS

DOCUMENT NUMBER:

132:205395

TITLE:

Antigenic inclusion membrane protein C of Chlamydia and the gene encoding it and their

uses

INVENTOR (S):

Murdin, Andrew D.; Dunn, Pamela

L.; Oomen, Raymond P.

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE: PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                  KIND DATE
                                     APPLICATION NO. DATE
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    WO 2000011181
                    A1
                         20000302
                                      WO 1999-CA766
                                                      19990819
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
           CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
           ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
           LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD,
           SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU,
           ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
           DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
           CF, CG, CT, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                    A1 20000314 AU 1999-53660 1-9990819
    AU 9953660
PRIORITY APPLN. INFO.: US 1998-97199 19980820
                                      US 1999-132961
                                                      19990507
```

WO 1999-CA766 19990819

An isolated and purified nucleic acid mol. encoding the inclusion membrane protein C of a strain of Chlamydia, is useful for nucleic acid immunization of a host, including a human host, against disease caused by infection by a strain of Chlamydia, particularly C. pneumoniae. The gene was cloned by PCR. BALB/C mice vaccinated with an expression vector for the protein showed increased resistance to challenge with C. pneumoniae. Vaccinated mice showed slower rates of growth of C. pneumoniae in the lungs than did control animals.

L15 ANSWER 15 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 15

ACCESSION NUMBER: 2000:145033 CAPLUS

DOCUMENT NUMBER:

132:205394

TITLE:

An antigenic outer membrane protein, POMP91A, of

Chlamydia and the gene encoding it and their

uses

INVENTOR(S):

Murdin, Andrew D.; Dunn, Pamela

L.; Oomen, Raymond P.

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2000011180	A1 20000302	WO 1999-CA765	19990819
W: AE, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY, CA,	CH, CN, CR,
CU, CZ,	DE, DK, DM, EE,	ES, FI, GB, GD, GE, GH,	GM, HR, HU,
	Searcher	: Shears 308-499	94

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ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
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             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            20000314
                                          AU 1999-53659
     AU 9953659
                      A1
                                                            19990819
PRIORITY APPLN. INFO.:
                                           US 1998-97198
                                                            19980820
                                           WO 1999-CA765
                                                            19990819
    An isolated and purified nucleic acid mol. encoding a POMP91A
AΒ
     protein of a strain of Chlamydia, is useful for nucleic acid
     immunization of a host, including a human host, against disease
     caused by infection by a strain of Chlamdia, particularly C.
    pneumoniae. The gene was cloned by PCR. BALB/C_mice_vaceinated
    with an expression vector for the protein showed increased
    resistance to challenge with C. pneumoniae. Vaccinated mice showed
     slower rates of growth of C. pneumoniae in the lungs than did
     control animals.
L15 ANSWER 16 OF 34 CAPLUS COPYRIGHT 2000 ACS
                                                       DUPLICATE 16
ACCESSION NUMBER:
                        2000:98784 CAPLUS
DOCUMENT NUMBER:
                        132:147637
                        Protein and DNA sequences encoding a Chlamydia
TITLE:
                        pneumoniae outer membrane protein (designated
                        CPN100314), and uses thereof in vaccines and
                        diagnostic assays
                        Murdin, Andrew D.; Oomen, Raymond
INVENTOR(S):
                        P.; Dunn, Pamela L.
PATENT ASSIGNEE(S):
                         Connaught Laboratories Limited, Can.
SOURCE:
                        PCT Int. Appl., 52 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                     KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
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                                           _____
                      _ _ _ _
                                          WO 1999-IB1333
    WO 2000006743
                           20000210
                                                           19990727
                      A2
    WO 2000006743
                      Α3
                            20000504
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU,
            CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
            SI, SK, SL, TJ, TM, TR, TT
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,
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DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

Shears 308-4994

CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

Searcher :

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AU 9947934 Al 20000221 AU 1999-47934 19990727
PRIORITY APPLN. INFO.: US 1998-94203 19980727
US 1999-122045 19990301
US 1999-360434 19990726
WO 1999-IB1333 19990727
```

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein, designated CPN100314. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence (gene omp) encoding CPN100314 operably linked to a promoter to effect expression of CPN100314 in the host. The invention also provides for the use of the CPN100314 protein/gene in diagnostic assays for Chlamydia infection.

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L15 ANSWER 17 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 17
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ACCESSION NUMBER:

2000:98783 CAPLUS

DOCUMENT NUMBER:

132:147636

TITLE:

Protein and DNA sequences encoding a Chlamydia pneumoniae antigen (designated CPN100605), and uses thereof in vaccines and diagnostic assays

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond

Р.

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 48 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.			KIND DATE				APPLICATION NO.				ο.	DATE				
WO	2000	0067	42	A:	2	20000210			WO 1999-IB1331				1	19990727		
WO	2000	0067	42	A.	3	2000	0427									
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		IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,
		SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,
		AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM						
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
AU	9947	932		A:	1	2000	0221		ΑI	J 19	99-4	7932		1999	0727	
PRIORIT	Y APP	LN.	INFO	. :					U	5 19:	98-9	4195		1998	0727	
									U	S 19:	99-3	6144	3	1999	0726	
									U	S 19:	98-9	4192		1998	0727	
									W	0 19:	99-I	B133	1	1999	0727	
						Sear	cher	:	:	Shea	rs	308	-499	4		

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae protein, designated CPN100605. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100605 operably linked to a promoter to effect expression of CPN100605 in the host. The invention also provides for the use of the CPN100605 protein/gene in diagnostic assays for Chlamydia infection.

L15 ANSWER 18 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 18

ACCESSION NUMBER:

2000:98781 CAPLUS

DOCUMENT NUMBER:

132:147635

TITLE:

Protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein (designated CPN100501), and uses thereof in vaccines and

diagnostic assays

INVENTOR (S):

Murdin, Andrew D.; Oomen, Raymond

P.; Dunn, Pamela L.

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 55 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                                                           DATE
                           -----
                                          -----
                     A1
                           20000210
                                          WO 1999-IB1330
                                                           19990727
    WO 2000006741
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            CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
            SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW,
            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
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                           20000221
    AU 9947931
                      A1
                                          AU 1999-47931
                                                           19990727
PRIORITY APPLN. INFO.:
                                          US 1998-94192
                                                           19980727
                                          US 1999-122044
                                                           19990301
                                          US 1999-361440
                                                           19990726
                                          WO 1999-IB1330
                                                           19990727
```

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein, designated CPN100501. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence (gene mip) encoding CPN100501 operably linked to a promoter to effect expression of Searcher: Shears 308-4994

CPN100501 in the host. The invention also provides for the use of the CPN100501 protein/gene in diagnostic assays for Chlamydia infection.

REFERENCE COUNT:

7

REFERENCE(S):

- (1) Griffais Remy; WO 9927105 A 1999
- (4) Kalman, S; NATURE GENETICS 1999, V21, P385 CAPLUS
- (5) Lundemose, A; MOLECULAR MICROBIOLOGY 1992, V6(17), P2539 CAPLUS
- (6) Melgosa, M; FEMS MICROBIOLOGY LETTERS 1993, V112, P199 CAPLUS
- (7) Rockey, D; MICROBIOLOGY 1996, V142, P945 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 34 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 19

ACCESSION NUMBER:

2000:98780 CAPLUS

DOCUMENT NUMBER:

132:147634

TITLE:

Protein and DNA sequences encoding a Chlamydia pneumoniae antigen (designated CPN100149), and uses thereof in vaccines and diagnostic assays

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond

Р.

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 51 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.			KIND DATE					APPLICATION NO. DATE								
	WO	2000	00674	40	A1 20000210					WO 1999-IB1329 19990727							
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			IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,
			ŞΙ,	SK,	SL,	TJ,	TM,	TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,
			AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM						
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,
			DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	AU	9947	930		A	1 :	2000	0221		Αl	U 19	99-4	7930		1999	0727	
PRIO	RITY	APP	LN.	INFO	. :					U	S 19	98-9	4191		1998	0727	
										U	S 19	99-3	6104	0	1999	0726	
										W	0 19:	99-I	B132	9	1999	0727	
AR	Thi	s in	vent	ioni	ກາດທ	ides	nro	tein	and	ВΝΔ	sea	ienc	eg e	ncod	ina :	a	

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae protein, designated CPN100149. The invention Searcher: Shears 308-4994

also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100149 operably linked to a promoter to effect expression of CPN100149 in the host. The invention also provides for the use of the CPN100149 protein/gene in diagnostic assays for Chlamydia infection.

REFERENCE COUNT:

REFERENCE(S):

- (1) Griffais Remy; WO 9927105 A 1999
- (2) Hitachi Chemical Co Ltd; EP 0784059 A 1997
- (3) Kalman; "Chlamydia pneumoniae section 84 of 103 of the complete genome" EMBL ACC NO: AE001668 1999
- (4) Stephens; "Chlamydia trachomatis section 71 of 87 of the complete genome" EMBL ACC NO: AE001344 1998_
- (5) Univ Manitoba; WO 9802546 A 1998

L15 ANSWER 20 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 20

ACCESSION NUMBER:

2000:98778 CAPLUS

DOCUMENT NUMBER:

132:147633

TITLE:

Protein and DNA sequences encoding a Chlamydia pneumoniae antigen (designated CPN100202), and uses thereof in vaccines and diagnostic assays

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond

PATENT ASSIGNEE(S):

Connaught Laboratories Limited, Can.

SOURCE:

PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.			KIND DATE					APPLICATION NO. DATE							
WC	2000	00673	39	A2	2 :	2000	0210		W	199	99-II	3132	3	1999	727	
	W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,
		CZ,	DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,
		SI,	SK,	SL,	TJ,	TM,	TR,	TT,	UA,	ŪĠ,	US,	UΖ,	VN,	YU,	ZA,	ZW,
		AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM						
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
AU	9947	929		A:	1 :	2000	0221		Αī	J 19	99-4	7929		19990	727	
PRIORIT	Y APP	LN.	INFO	. :					U:	3 19	98-94	1198		19980	727	
									U	3 19	99-36	5070	7	1999	0726	
									W	199	99-II	31328	3	1999	727	
						Sear	cher	:	5	Shear	cs	308	-499	4		

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae protein, designated CPN100202. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100202 operably linked to a promoter to effect expression of CPN100202 in the host. The invention also provides for the use of the CPN100202 protein/gene in diagnostic assays for Chlamydia infection. Sequence no. 4 claimed but not present.

L15 ANSWER 21 OF 34 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER:

2000:790638 CAPLUS

TITLE:

Chlamydia pneumoniae protein and DNA sequences,

and their diagnostic and therapeutic uses

INVENTOR(S):

Murdin, Andrew D.; Oomen, Raymond
P.; Wang, Joe; Dunn, Pamela

PATENT ASSIGNEE (S):

Aventis Pasteur Limited, Can.

SOURCE:

PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT 1	NO.		KI	ND I	DATE			A.	PPLI	CATI	ON NO	o. 1	DATE		
WO	2000	0667	39	A2 20001109				WO 2000-CA511					20000503			
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,
		US,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
PRIORITY	APP:	LN.	INFO	.:					U:	S 19	99-1	3227) :	1999	0503	
									U	S 19	99-1	4127	5 :	1999	0630	

AB The invention provides protein and DNA sequences of full-length, 5'-truncated or 3'-truncated 76kDa protein of a strain of Chlamydia pneumoniae. The present invention also relates to immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia, specifically C. pneumoniae, employing a vector contg. a Chlamydia protein gene and a promoter to effect expression of the 76kDa protein gene in the host.

L15 ANSWER 22 OF 34 TOXLIT

ACCESSION NUMBER: 2000:31923 TOXLIT DOCUMENT NUMBER: CA-133-013445P

Chlamydia pneumoniae antigens and corresponding DNA TITLE:

fragments.

AUTHOR:

Murdin AD; Oomen RP; Wang J

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 0032794 06/08/2000

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY: DOCUMENT TYPE:

CANADA Patent CA

FILE SEGMENT: LANGUAGE:

English

OTHER SOURCE:

CA 133:13445

ENTRY MONTH:

200006

The present invention provides five purified and isolated polynucleotide mols. that encode Chlamydia pneumoniae polypeptides

which can be used in methods to prevent, treat and diagnose-

Chlamydia infection. In one form of the invention, the

polynucleotide mols. are selected from DNA that encode polypeptides

CPN100634, CPN100635, CPN100638, CPN100639, and CPN100708.

L15 ANSWER 23 OF 34 TOXLIT

ACCESSION NUMBER:

2000:6687 TOXLIT

DOCUMENT NUMBER:

CA-132-176659E

TITLE:

Chlamydia pneumoniae antigens and corresponding DNA

fragments and their diagnostic and therapeutic uses.

AUTHOR:

Murdin AD; Oomen RP

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 0011183 03/02/2000

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY:

CANADA Patent

DOCUMENT TYPE: FILE SEGMENT:

CA

LANGUAGE:

English

OTHER SOURCE:

CA 132:176659

ENTRY MONTH:

200003

In the Chlamydia pneumoniae genome, 8 open reading frames encoding chlamydial polypeptides are provided. These polypeptides include polypeptides permanently found in the bacterial membrane structure, polypeptides that are present in the external vicinity of the bacterial membrane, polypeptides permanently found in the inclusion membrane structure, polypeptides that are present in the external vicinity of the inclusion membrane, and polypeptides that are released into the cytoplasm of the infected cell. These polypeptides can be used in vaccination methods for preventing and treating Chlamydia infection. Thus, the present invention provides a method of nucleic acid immunization of a host, including humans, against disease caused by infection by a strain of Chlamydia pneumoniae, employing a vector contg. a nucleotide sequence encoding any of the following polypeptides: CPN 100111, CPN 100224, CPN 100230, CPN 100231, CPN 100232, CPN 100235, CPN 100394, CPN 100395 and a

Searcher Shears promoter to effect expression of any of the polypeptides in the host.

L15 ANSWER 24 OF 34 TOXLIT

ACCESSION NUMBER:

2000:4509 TOXLIT

DOCUMENT NUMBER:

CA-132-147637R

TITLE:

Protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein (designated CPN100314), and uses thereof in vaccines and

diagnostic assays.

AUTHOR:

Murdin AD; Oomen RP; Dunn

PL

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 006743 02/10/2000

and the same of the same of

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY:

CANADA Patent

DOCUMENT TYPE: FILE SEGMENT:

CA English

LANGUAGE:

CA 132:147637

OTHER SOURCE:

200003

ENTRY MONTH:

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein, designated CPN100314. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence (gene omp) encoding CPN100314 operably linked to a promoter to effect expression of CPN100314 in the host. The invention also provides for the use of the CPN100314 protein/gene in diagnostic assays for Chlamydia infection.

L15 ANSWER 25 OF 34 TOXLIT

ACCESSION NUMBER:

2000:4508 TOXLIT

DOCUMENT NUMBER:

CA-132-1476360

TITLE:

Protein and DNA sequences encoding a Chlamydia

pneumoniae antigen (designated CPN100605), and uses

thereof in vaccines and diagnostic assays.

AUTHOR:

Murdin AD; Oomen RP

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 006742 02/10/2000

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY:

CANADA Patent

DOCUMENT TYPE:

CA

FILE SEGMENT:

English

LANGUAGE: OTHER SOURCE:

CA 132:147636

ENTRY MONTH:

200003

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae protein, designated CPN100605. The invention

Searcher

Shears 308-4994

also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100605 operably linked to a promoter to effect expression of CPN100605 in the host. The invention also provides for the use of the CPN100605 protein/gene in diagnostic assays for Chlamydia infection.

L15 ANSWER 26 OF 34 TOXLIT

ACCESSION NUMBER:

2000:4507 TOXLIT

DOCUMENT NUMBER:

CA-132-147635P

TITLE:

Protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein (designated CPN100501), and uses thereof in vaccines and

diagnostic assays.

AUTHOR:_

Murdin-AD;-Oomen-RP; Dunn

- .. -**pl**

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 006741 02/10/2000

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY:

CANADA

DOCUMENT TYPE:

Patent

FILE SEGMENT:

CA

LANGUAGE:

English

OTHER SOURCE:

CA 132:147635

ENTRY MONTH:

200003

This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae outer membrane protein, designated CPN100501. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence (gene mip) encoding CPN100501 operably linked to a promoter to effect expression of CPN100501 in the host. The invention also provides for the use of the CPN100501 protein/gene in diagnostic assays for Chlamydia infection.

L15 ANSWER 27 OF 34 TOXLIT

ACCESSION NUMBER:

2000:4506 TOXLIT

DOCUMENT NUMBER:

CA-132-147634N

TITLE:

Protein and DNA sequences encoding a Chlamydia

pneumoniae antigen (designated CPN100149), and uses

thereof in vaccines and diagnostic assays.

AUTHOR:

Murdin AD; Oomen RP

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 006740 02/10/2000

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY:

CANADA

DOCUMENT TYPE:

Patent

FILE SEGMENT:

LANGUAGE:

English

Searcher :

Shears 308-4994 OTHER SOURCE:

CA 132:147634

ENTRY MONTH:

200003

This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae protein, designated CPN100149. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100149 operably linked to a promoter to effect expression of CPN100149 in the host. The invention also provides for the use of the CPN100149 protein/gene in diagnostic assays for Chlamydia infection.

L15 ANSWER 28 OF 34 TOXLIT

ACCESSION NUMBER: 2000:4505 TOXLIT DOCUMENT NUMBER: CA-132-147633M

TITLE:

Protein-and DNA-sequences-encoding a Chlamydia

pneumoniae antigen (designated CPN100202), and uses

thereof in vaccines and diagnostic assays.

AUTHOR:

Murdin AD; Oomen RP

SOURCE:

(2000). PCT Int. Appl. PATENT NO. 006739 02/10/2000

(Connaught Laboratories Limited).

CODEN: PIXXD2.

PUB. COUNTRY:

CANADA Patent

DOCUMENT TYPE: FILE SEGMENT:

Patent CA

LANGUAGE:

English

OTHER SOURCE:

CA 132:147633

ENTRY MONTH:

200003

AB This invention provides protein and DNA sequences encoding a Chlamydia pneumoniae protein, designated CPN100202. The invention also provides for the use of the disclosed protein/gene in vaccines against Chlamydia. Thus, the invention discloses a vector contg. a nucleotide sequence encoding CPN100202 operably linked to a promoter to effect expression of CPN100202 in the host. The invention also provides for the use of the CPN100202 protein/gene in diagnostic assays for Chlamydia infection. Sequence no. 4 claimed but not present.

L15 ANSWER 29 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 21

ACCESSION NUMBER:

2000:511106 CAPLUS

TITLE:

Use of a mouse lung challenge model to identify

antigens protective against Chlamydia pneumoniae

lung infection

AUTHOR (S):

Murdin, Andrew D.; Dunn,

Pamela; Sodoyer, Regis; Wang, Joe;

Caterini, Judy; Brunham, Robert C.; Aujame, Luc;

Oomen, Ray

CORPORATE SOURCE:

Molecular Biology, Aventis Pasteur, Toronto, ON,

M2R 3T4, Can.

SOURCE:

J. Infect. Dis. (2000), 181(Suppl. 3), S544-S551

CODEN: JIDIAQ; ISSN: 0022-1899 University of Chicago Press

DOCUMENT TYPE:

Journal

LANGUAGE:

PUBLISHER:

English

AB Chlamydia pneumoniae is emerging as a significant human pathogen.
Infection causes a range of respiratory tract diseases and is assocd. with atherosclerosis. A vaccine could provide a

considerable public health benefit; however, antigens able to elicit a protective immune response are largely unknown. A panel of open-reading frames (ORFs) from the C. pneumoniae genome sequence was screened for ability to elicit protective responses. Balb/c mice immunized with DNA contg. the ORFs were tested for their

ability to limit lung infection following an intranasal challenge. Immunization with DNA encoding the major outer membrane protein or

an ADP/ATP translocase (NptlCp) of C. pneumoniae resulted in a reduced bacteria load in the lung after challenge. The identification of these antigens as protective is a significant step toward development of a C. pneumoniae vaccine and demonstrates the feasibility of using a DNA immunization strategy to screen the C. pneumoniae genome for other protective ORFs.

REFERENCE COUNT:

47

REFERENCE(S):

- (2) Belshe, R; AIDS 1998, V12, P2407 CAPLUS
- (4) Chen, S; J Virol 1998, V72, P5757 CAPLUS
- (6) Evans, T; J Infect Dis 1999, V180, P290 CAPLUS
- (12) Ishii, N; AIDS Res Hum Retroviruses 1997, V13, P1421 CAPLUS
- (14) Kalman, S; Nat Genet 1999, V21, P385 CAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 30 OF 34 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

ACCESSION NUMBER:

2000225593 EMBASE

TITLE:

Use of a mouse lung challenge model to identify

antigens protective against Chlamydia pneumoniae lung

infection.

AUTHOR:

Murdin A.D.; Dunn P.; Sodoyer R.;

Wang J.; Caterini J.; Brunham R.C.; Aujame L.;

Oomen R.

CORPORATE SOURCE:

Dr. A.D. Murdin, Aventis Pasteur Canada, 1755 Steeles

Ave. W., Toronto, Ont. M2R 3T4, Canada.

andrew.murdin@aventis.com

SOURCE:

Journal of Infectious Diseases, (2000) 181/6 SUPPL. 3

(S544-S551).

Refs: 47

ISSN: 0022-1899 CODEN: JIDIAQ

COUNTRY:

United States

DOCUMENT TYPE:

Journal; Conference Article

FILE SEGMENT:

004 Microbiology

004 Microbiology

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

Chlamydia pneumoniae is emerging as a significant human pathogen. Infection causes a range of respiratory tract diseases and is associated with atherosclerosis. A vaccine could provide a considerable public health benefit; however, antigens able to elicit a protective immune response are largely unknown. A panel of open-reading frames (ORFs) from the C. pneumoniae genome sequence was screened for ability to elicit protective responses. Balb/c mice immunized with DNA containing the ORFs were tested for their ability to limit lung infection following an intranasal challenge. Immunization with DNA encoding the major outer membrane protein or an ADP/ATP translocase (Npt1(Cp)) of C. pneumoniae resulted in a reduced bacteria load in the lung after challenge. The identification of these antigens as protective is a significant step toward development of a C. pneumoniae vaccine and demonstrates the feasibility of using a DNA immunization strategy to screen the C. pneumoniae genome for other protective ORFs.

L15 ANSWER 31 OF 34 CAPLUS COPYRIGHT 2000 ACS **DUPLICATE 22**

1998:130762 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 128:253117

TITLE:

Chlamydia trachomatis infection in the female

reproductive tract of the rat: influence of

progesterone on infectivity and immune response

Kaushic, Charu; Murdin, Andrew D.; AUTHOR (S):

Underdown, Brian J.; Wira, Charles R.

CORPORATE SOURCE: Department of Physiology, Dartmouth Medical

School, Lebanon, NH, 03756-0001, USA

Infect. Immun. (1998), 66(3), 893-898 SOURCE:

CODEN: INFIBR; ISSN: 0019-9567

American Society for Microbiology PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

As the most common cause of sexually transmitted disease in women, AΒ chlamydial infections can lead to pelvic inflammatory disease, infertility, and ectopic pregnancy. To better understand the role played by sex hormones in modulating the immune response of the genital tract to microbial infections, the authors have developed a rat model to study Chlamydia trachomatis infection. Inbred female Lewis rats were primed with progesterone and inoculated by intrauterine instillation of C. trachomatis (mouse pneumonitis strain MoPn) into each uterine horn. When infected animals were examd. for the presence of chlamydial antigens 14 days postinfection, both the uterus and vagina were found to be pos. compared to those of saline-treated animals, which did not show specific staining. The involvement of local and systemic immune systems following chlamydial infection was detd.

by analyzing major histocompatibility complex (MHC) class II expression in the reproductive tract and lymphocyte proliferation in response to mitogenic and chlamydia-specific stimulation of cells from the spleen and lymph nodes (LN) draining the reproductive tract. Enhanced proliferation was obsd. in LN following mitogenic but not antigenic (MOMP [major outer membrane protein]) stimulation. In contrast, spleen cell proliferation was lower in chlamydia-infected rats than in saline-treated controls. MHC class II expression, an indicator of inflammatory responses, was upregulated in the uterus, on glandular epithelial cells, and adjacent to glands in response to chlamydial infection. In other expts., when rats were infected at estrus and diestrus without prior progesterone priming, chlamydial inclusions were not detected in either the uterus or vagina. However, enhanced lymphocyte proliferation was obsd. in response to mitogenic and MOMP stimulation in the reproductive tract-draining LN from estrus and diestrous animals. These findings indicate that under appropriate endocrine conditions, the rat uterus is susceptible to C. trachomatis infection and that immune responses to this pathogen can be detected locally and systemically. Further, they suggest that clearance of the infection from the reproductive tract involves immune cells from the LN draining the reproductive tract.

L15 ANSWER 32 OF 34 CAPLUS COPYRIGHT 2000 ACS

DUPLICATE 23

ACCESSION NUMBER:

1995:382778 CAPLUS

DOCUMENT NUMBER:

122:142485

TITLE:

Hybrid picornaviruses expressing chlamydial

epitopes

INVENTOR (S):

Murdin, Andrew David; Caldwell, Harlan

Delano; Klein, Michel Henri; Oomen, Raymond

Shears

308-4994

Peter

PATENT ASSIGNEE(S):

Connaught Laboratories Ltd., Can.

SOURCE:

PCT Int. Appl., 98 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT I	. 00		KI	ND :	DATE			AF	PLIC	CATIO	ои ис	٥.	DATE		
WO	9426	900		A2	2	1994	1124		WC	199	94 - CI	A262		1994	0512	
	W:	ΑU,	BR,	CA,	CN,	FI,	JP,	KR,	NO,	NZ,	RU,	UA,	US			
	RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,
		SE														
CA	2162	664		A.	Ą	1994	1124		CF	199	94-23	1626	64	1994	0512	
ΑU	9467	183		A:	1	1994	1212		ΑU	J 199	94-67	7183		1994	0512	
ΕP	6981	00		A:	l	1996	0228		EF	199	94-91	1548	5	1994	0512	
	R:	DE,	FR,	GB												

Searcher

PRIORITY APPLN. INFO.:

US 1993-60978 19930513 WO 1994-CA262 19940512

AB Hybrid picornaviruses expressing chlamydial epitopes from the major outer membrane protein (MOMP) of Chlamydia trachomatis in a functional form are described. The hybrid viruses grow to high titer in cell culture and when administered to mammals induce an immune response against both the picornavirus and C. trachomatis. The antisera from immunized mammals neutralized both homotypic and heterotypic serovars of C. trachomatis. The hybrid picornaviruses have utility as vaccines and as tools for the generation of immunol. reagents. Methods for modifying surface exposed loops of known sequences to produce hybrid proteins are described. Thus using a SalI-HindIII mutagenesis cartridge, the PV1-Mahoney cDNA clone pT7XLD was modified to encode amino acid sequence from C. trachomatis MOMP variable domain I and variable domain IV. The mutagenesis cartridge is contained between poliovirus nucleotides 2753-2791, which encode poliovirus amino acids 1092-1104 that include the BC loop of capsid protein VP1. The polio-specific nucleotide sequence within the cartridge was replace with synthetic oligonucleotides encoding the C. trachomatis MOMP epitopes. Several details strategies are presented for genetic engineering of the picornavirus constructs. The advantages of the hybrid picornaviruses include (1) growth of the hybrid picornaviruses to a high titer, (2) the capability to induce a strong and cross-reactive anti-chlamydial immune response at the same time as inducing a strong anti-polio immune response, (3) administration of the picornaviruses as oral vaccines in combination with one or more other immunogenic and/or immunostimulating mols., (4) and no possibility of potentiating chlamydial disease by sensitizing vaccines because of the absence of the 57-kDa SRP.

L15 ANSWER 33 OF 34 TOXLIT

ACCESSION NUMBER: 1995:43491 TOXLIT DOCUMENT NUMBER: CA-122-142485Y

TITLE: Hybrid picornaviruses expressing chlamydial epitopes.

AUTHOR: Murdin AD; Caldwell HD; Klein MH;

Oomen RP

SOURCE: (1994). PCT Int. Appl. PATENT NO. 94 26900 11/24/94

(Connaught Laboratories Ltd.).

PUB. COUNTRY: Canada
DOCUMENT TYPE: Patent
FILE SEGMENT: CA
LANGUAGE: English
OTHER SOURCE: CA 122:142485

ENTRY MONTH: 199504

AB Hybrid picornaviruses expressing chlamydial epitopes from the major outer membrane protein (MOMP) of Chlamydia trachomatis in a functional form are described. The hybrid viruses grow to high titer in cell culture and when administered to mammals induce an

immune response against both the picornavirus and C. trachomatis. The antisera from immunized mammals neutralized both homotypic and heterotypic serovars of C. trachomatis. The hybrid picornaviruses have utility as vaccines and as tools for the generation of immunol. reagents. Methods for modifying surface exposed loops of known sequences to produce hybrid proteins are described. Thus using a SalI-HindIII mutagenesis cartridge, the PV1-Mahoney cDNA clone pT7XLD was modified to encode amino acid sequence from C. trachomatis MOMP variable domain I and variable domain IV. mutagenesis cartridge is contained between poliovirus nucleotides 2753-2791, which encode poliovirus amino acids 1092-1104 that include the BC loop of capsid protein VP1. The polio-specific nucleotide sequence within the cartridge was replace with synthetic oligonucleotides encoding the C. trachomatis MOMP epitopes. Several details strategies are presented for genetic engineering of the picornavirus constructs. The advantages of the hybrid picornaviruses include (1) growth of the hybrid picornaviruses to a high titer, (2) the capability to induce a strong and cross-reactive anti-chlamydial immune response at the same time as inducing a strong anti-polio immune response, (3) administration of the picornaviruses as oral vaccines in combination with one or more other immunogenic and/or immunostimulating mols., (4) and no possibility of potentiating chlamydial disease by sensitizing vaccines because of the absence of the 57-kDa SRP.

L15 ANSWER 34 OF 34 CAPLUS COPYRIGHT 2000 ACS **DUPLICATE 24**

ACCESSION NUMBER:

1994:28847 CAPLUS

DOCUMENT NUMBER:

120:28847

TITLE:

A poliovirus hybrid expressing a neutralization epitope from the major outer membrane protein of

Chlamydia trachomatis is highly immunogenic

AUTHOR (S):

Murdin, Andrew D.; Su, Hua; Manning,

D. Scott; Klein, Michel H.; Parnell, Michael J.;

Caldwell, Harlan D.

CORPORATE SOURCE:

Connaught Cent. Biotechnol. Res., Willowdale,

ON, M2R 3T4, Can.

SOURCE:

Infect. Immun. (1993), 61(10), 4406-14

CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Trachoma and sexually transmitted diseases caused by Chlamydia trachomatis are major health problems worldwide. Epitopes on the major outer membrane protein (MOMP) of C. trachomatis have been identified as important targets for the development of vaccines. In order to examine the immunogenicity of a recombinant vector expressing a chlamydial epitope, a poliovirus hybrid was constructed in which part of neutralization antigenic site I of poliovirus type 1 Mahoney (PV1-M) was replaced by a sequence from variable domain I of the MOMP of C. trachomatis serovar A. The chlamydia sequence

308-4994 Searcher Shears

included the neutralization epitope VAGLEK. This hybrid was viable, grew very well compared with PV1-M, and expressed both poliovirus and chlamydial antigenic determinants. When inoculated into rabbits, this hybrid was highly immunogenic, including a strong response against both PV1-M and C. trachomatis serovar A. Antichlamydia titers were 10-100-fold higher than the titers induced by equimolar amts. of either purified MOMP or a synthetic peptide expressing the VAGLEK epitope. Furthermore, rabbit antisera raised against this hybrid neutralized chlamydial infectivity both in vitro, for hamster kidney cells, and passively in vivo, for conjunctival epithelia of cynomolgus monkeys.

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File 440:Current Contents Search(R) 1990-2000/Dec W1

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File 348: European Patents 1978-2000/Nov W03

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File 357: Derwent Biotechnology Abs 1982-2000/Dec B1

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File 113: European R&D Database 1997

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Set Items Description

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Set	Items	Description
S1	3174	CHLAMYDIA (5N) (DETERM? OR DETECT? OR SCREEN? OR DET??)
S2	630	S1 AND (PROBE? ? OR PRIMER? ? OR REAGENT? ?)
S3	249	S2 AND (HYBRIDIS? OR HYBRIDIZ?)
S4	34	S3 AND (POLYNUCLEOTIDE? ? OR POLY(W) NUCLEOTIDE? ?)
S5	33	RD (unique items)
>>>No	matching	display code(s) found in file(s): 65, 113

5/3,AB/1 (Item 1 from file: 348)
DIALOG(R)File 348:European Patents

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00964580

*Primers"*** and kits for the *detection"*** of *Chlamydia"*** trachomatis

*Primer"*** und Kit fur den Nachweis von Chlamydia trachomatis

Amorces et trousse pour la *detection"*** de *Chlamydia"*** trachomatis PATENT ASSIGNEE:

F. Hoffmann-La Roche AG, (200574), , 4002 Basel, (CH), (applicant designated states: AT;BE;CH;DE;DK;ES;FR;GB;IT;LI;NL;SE) INVENTOR:

Longiaru, Mathew, 5 Weber Road, West Orange, N.J. 07052, (US)
Silver, Sheryl Beth, 1590 Anderson Avenue, Fort Lee, N.J. 07024, (US)
Sulzinski, Michael Anthony, 61 Alan Road, Spring Valley, N.J. 10977, (US)
Searcher: Shears 308-4994

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LEGAL REPRESENTATIVE:
  Best, Michael, Dr. et al (79461), Lederer, Keller & Riederer
    Patentanwalte Prinzregentenstrasse 16, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 875583 A2 981104 (Basic)
                              EP 875583 A3 990217
APPLICATION (CC, No, Date): EP 98111076 900927;
PRIORITY (CC, No, Date): US 414542 890929
DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
  EP 420260 (EP 901186205)
INTERNATIONAL PATENT CLASS: C12Q-001/68;
ABSTRACT EP 875583 A2
    A format for *hybridization"*** capture of PCR amplified DNA on a solid
  support is provided. After labelling the amplified target_DNA_with_biotin_
during amplification, the labelled DNA is specifically captured by
  base-pair *hybridization"*** to an amplicon-specific oligonucleotide
  capture *probe"*** which is bound to a solid support and the labeled DNA
  is detected with a biotin dependent chromogenic detection assay. In a
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ABSTRACT WORD COUNT: 78

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

enable the *detection"*** of *Chlamydia"*** trachomatis.

specific format selected *primers"*** and *probes"*** are disclosed which

Available Text Language Update Word Count
CLAIMS A (English) 9845 427
SPEC A (English) 9845 9105
Total word count - document A 9532
Total word count - document B 0
Total word count - documents A + B 9532

5/3,AB/2 (Item 2 from file: 348) DIALOG(R)File 348:European Patents

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00961284

Neisseria gonorrhoae-specific oligonucleotides Neisseria gonorrhoae spezifische Oligonukleotide Oligonucleotides specifiques de Neisseria gonorrhoae PATENT ASSIGNEE:

F. HOFFMANN-LA ROCHE AG, (1107065), , 4070 Basel, (CH), (Applicant designated States: all)

INVENTOR:

Weiss, Judith Barbara, 6012 Auburn, Oakland, CA 94618, (US) LEGAL REPRESENTATIVE:

Knauer, Martin, Dr. et al (70651), Roche Diagnostics GmbH Patentabteilung Sandhofer Strasse 116, 68305 Mannheim, (DE)

PATENT (CC, No, Kind, Date): EP 872561 A2 981021 (Basic)

EP 872561 A3 991117

APPLICATION (CC, No, Date): EP 98106718 980414;

PRIORITY (CC, No, Date): US 70914 P 970418

DESIGNATED STATES: DE; FR; IT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: C12Q-001/68

ABSTRACT EP 872561 A2

The present invention relates to oligonucleotides which *hybridize"*** specifically to the cytosine DNA methyltransferase gene of Neisseria gonorrhoeae and distinguish the cytosine DNA methyltransferase gene of N. gonorrhoeae from highly homologous sequences which have been discovered in some strains of other species of the genus Neisseria. The oligonucleotides are useful as *primers"*** for the polymerase chain reaction (PCR) amplification of a nucleic acid sequence from the cytosine DNA methyltransferase gene of N. gonorrhoeae and in N. gonorrhoeae

amplification/detection assays.

The invention has applications in the detection of Neisseria gonorrhoeae, the field of medical diagnostics generally, and the field of molecular biology

ABSTRACT WORD COUNT: 102

LANGUAGE (Publication, Procedural, Application): English; English; Fulltext AVAILABILITY:

Available Text	Language Update	Word Count
CLAIMS A	(English) 9843	591
SPEC A	(English) 9843	6979
Total word coun	nt - document A	7570
Total word coun	nt - document B	0
Total word coun	nt - documents A + B	7570

5/3,AB/3 (Item 3 from file: 348) DIALOG(R)File 348:European Patents

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00905621

Detection of nucleic acids using G-quartets
Nachweis von Nukleinsauren unter Verwendung von G-Quartetten
Detection d'acides nucleiques par utilisation de G-quatuors
PATENT ASSIGNEE:

Becton, Dickinson and Company, (208883), One Becton Drive, Franklin Lakes, New Jersey 07417-1880, (US), (applicant designated states: AT;BE;DE;ES;FR;GB;IT;NL;SE)

INVENTOR:

Pitner, J. Bruce, Route 5, Box 92C, Durham, North Carolina 27704, (US) Vonk, Glenn P., 2717 Piney-Grove Wilbon Road, Fuquay-Varina, North Carolina 27526, (US)

Nadeau, James G., 710 Coker Lane, Chapel Hill, North Carolina 27514, (US) LEGAL REPRESENTATIVE:

Rambelli, Paolo et al (55471), c/o JACOBACCI & PERANI S.p.A. Corso Regio Parco, 27, 10152 Torino, (IT)

PATENT (CC, No, Kind, Date): EP 826780 A1 980304 (Basic)

APPLICATION (CC, No, Date): EP 97114791 970827;

PRIORITY (CC, No, Date): US 703755 960827

DESIGNATED STATES: AT; BE; DE; ES; FR; GB; IT; NL; SE

INTERNATIONAL PATENT CLASS: C12Q-001/68

ABSTRACT EP 826780 A1

Oligonucleotides which form G-quartet structures have been found to be useful in fluorescence assays to detect a selected nucleic acid sequence. When one end of the oligonucleotide is labeled with a donor fluorophore and the other end is labeled with an acceptor dye, the folding of the molecule in the G-quartet structure brings the donor-acceptor pair into close proximity, allowing an interaction between the two labels which results in quenching of donor fluorescence or a change in other fluorescence properties which are the result of the interaction of two dyes in close proximity. The G-quartet structure unfolds upon *hybridization"*** to its complementary sequence, increasing the distance between the two dye labels. This results in decreased donor quenching or a change in another proximity-related fluorescence parameter. The associated increase in donor fluorescence intensity or the change in another fluorescence parameter may be monitored as an indication of the presence of a selected nucleic acid sequence. Alternatively, in some cases a decrease in acceptor fluorescence may be monitored as an indication of the presence of the selected nucleic acid sequence when the acceptor is also a fluorophore.

ABSTRACT WORD COUNT: 186

LANGUAGE (Publication, Procedural, Application): English; English; Fulltext AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) 9810 466
SPEC A (English) 9810 4822
Total word count - document A 5288
Total word count - document B 0
Total word count - documents A + B 5288

5/3,AB/4 (Item 4 from file: 348) DIALOG(R)File 348:European Patents

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00768676

ANTIGENIC POLYPEPTIDE OF CHLAMYDIA PNEUMONIAE ANTIGENES POLYPEPTID AUS CHLAMYDIA PNEUMONIAE POLYPEPTIDE ANTIGENIQUE DE CHLAMYDIA PNEUMONIAE PATENT ASSIGNEE:

```
HITACHI CHEMICAL CO., LTD., (1192837), 1-1, Nishishinjuku 2-chome,
    Shinjuku-ku, Tokyo 163-04, (JP), (applicant designated states:
    BE; CH; DE; ES; FR; GB; IT; LI; SE)
INVENTOR:
  IZUTSU, Hiroshi, 1596-10, Maeno, Tsukuba-shi, Ibaraki 300-32, (JP)
 OBARA, Kazuhiko, Hitachikasei Shihoryo 15-18, Hanabatake 1-chome,
    Tsukuba-shi Ibaraki 300-32, (JP)
  MATSUMOTO, Akira, 8-2-4, Shoshinmachi, Kurashiki-shi, Okayama 701-01,
    (JP)
LEGAL REPRESENTATIVE:
  VOSSIUS & PARTNER (100311), Postfach 86 07 67, 81634 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 784059 A1 970716 (Basic)
                              WO 9609320 960328
APPLICATION (CC, No, Date):
                              EP 95932194 950920; WO 95JP1896 950920
PRIORITY (CC, No, Date): JP 94224711 940920; JP 95106006-950428; JP-
  95106008 950428; JP-95106009 950428; JP-95106010 950428; JP 95106011
    950428
DESIGNATED STATES: BE; CH; DE; ES; FR; GB; IT; LI; SE
INTERNATIONAL PATENT CLASS: C07K-014/295; C12N-015/31; C12N-001/21;
 C12P-021/02; C12P-021/08; C12Q-001/68; G01N-033/569;
LANGUAGE (Publication, Procedural, Application): English; English; Japanese
FULLTEXT AVAILABILITY:
Available Text Language
                           Update
                                     Word Count
      CLAIMS A
               (English)
                           EPAB97
                                      1058
                (English) EPAB97
                                     20122
      SPEC A
Total word count - document A
                                     21180
Total word count - document B
                                         0
Total word count - documents A + B
                                     21180
 5/3,AB/5
              (Item 5 from file: 348)
DIALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
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00750428

RNA template end-linked *probe"*** constructs and methods for use Endverbundene RNS-Matrixsonde und Verfahren zur Verwendung Sonde liee a la terminaison d'un moule d'ARN et procedes d'utilisation PATENT ASSIGNEE:

AMOCO CORPORATION, (683002), 200 East Randolph Drive P.O. Box 87703, Chicago Illinois 60680-0703, (US), (applicant designated states: AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)

INVENTOR:

Stefano, James E., 40-10 Briarwood Lane, Marlboro, Massachusetts 01752, (US)

LEGAL REPRESENTATIVE:

Bassil, Nicholas Charles et al (91231), Kilburn & Strode 20 Red Lion Street, London WC1R 4PJ, (GB)

PATENT (CC, No, Kind, Date): EP 707076 Al 960417 (Basic)
Searcher: Shears 308-4994

APPLICATION (CC, No, Date): EP 95114651 891002;

PRIORITY (CC, No, Date): US 252243 880930; US 370218 890622

DESIGNATED STATES: DE; FR; GB; IT

RELATED PARENT NUMBER(S) - PN (AN):

EP 361983 (EP 893100669)

INTERNATIONAL PATENT CLASS: C12Q-001/68; C12P-019/34; C07H-021/04;

ABSTRACT EP 707076 A1

New *probes"*** are provided for the detection of target RNA comprising RNA templates replicated by Q-beta replicase having a target specific *probe"*** attached through specific sequences at both the template's 3' and 5' ends whereby *hybridization"*** of the *probe"*** with target results in the formation of a cleavage inducible ribozyme. Following cleavage, the RNA template may be advantageously amplified by Q-beta replicase resulting in the generation of a large-signal correlatable to the presence of RNA target in the sample. Suitable methods employing such *probes"*** are also provided.

ABSTRACT WORD COUNT: 105

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPAB96 245
SPEC A (English) EPAB96 10250
Total word count - document A 10495
Total word count - document B 0
Total word count - documents A + B 10495

5/3,AB/6 (Item 6 from file: 348)
DIALOG(R)File 348:European Patents
(c) 2000 European Patent Office. All rts. reserv.

00701964

NON-RADIOACTIVE *HYBRIDIZATION"*** ASSAY AND KIT NICHT-RADIOAKTIVES *HYBRIDISATIONS"*** TESTVERFAHREN UND SATZ KIT ET DOSAGE UTILISANT *HYBRIDISATION"*** NON RADIOACTIVE PATENT ASSIGNEE:

Digene Diagnostics, Inc., (961810), 2301-B Broadbirch Drive, Silver Spring, Maryland 20904, (US), (Proprietor designated states: all) INVENTOR:

CHALLBERG, Sharon, 12400 West Old Baltimore Road, Boyds, MD 20841, (US) LORINCZ, Attila, 19409 Poinsetta Court, Gaithersburg, MD 20879, (US) LAZAR, James, G., 5301 Westbard Circle, Bethesda, MD 20816, (US) CULLEN, Allison, 1200 Ed-Glenn Drive, Woodbine, MD 21797, (US) IMPRAIM, Chaka, 448 Coventry Place, Danville, CA 94506, (US) LEDAL REPRESENTATIVE:

Bassett, Richard Simon (52833), Eric Potter Clarkson, Park View House, 58
The Ropewalk, Nottingham NG1 5DD, (GB)

PATENT (CC, No, Kind, Date): EP 667918 Al 950823 (Basic) EP 667918 B1 000216 WO 9310263 930527 APPLICATION (CC, No, Date): EP 92924354 921112; WO 92US9604 921112 PRIORITY (CC, No, Date): US 792585 911114 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; INTERNATIONAL PATENT CLASS: C12Q-001/68; C12Q-001/70 NOTE: No A-document published by EPO LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY: Available Text Language Update Word Count CLAIMS B (English) 200007 777 200007 769 CLAIMS B (German) CLAIMS B (French) 200007 SPEC B (English) 200007 (French) 200007 874 8395 Total word count - document A 0 Total word count - document B 10815 Total word count - documents A + B 10815 (Item 7 from file: 348) 5/3,AB/7 DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 00664934 Protection assay. Schutztest. Essai de protection. PATENT ASSIGNEE: GEN-*PROBE"*** INCORPORATED, (690910), 9880 Campus Point Drive, San Diego California 92121-1514, (US), (applicant designated states: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE INVENTOR: Arnold, Lyle John, 15638 Boulder Mountain Road, Poway, California 92064, (US) Nelson, Norman C., 3639 Marlesta Drive, San Diego, California 92111, (US) LEGAL REPRESENTATIVE: Sexton, Jane Helen (59301), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB) PATENT (CC, No, Kind, Date): EP 638807 Al 950215 (Basic) APPLICATION (CC, No, Date): EP 94117589 880921; PRIORITY (CC, No, Date): US 99392 870921 DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE RELATED PARENT NUMBER(S) - PN (AN): EP 309230 (EP 883087678) INTERNATIONAL PATENT CLASS: G01N-033/542; G01N-033/533; C12Q-001/68; G01N-033/58; G01N-033/532;

Searcher :

Shears 308-4994

ABSTRACT EP 638807 A1

Improved homogenous diagnostic assay methods and labels for detecting an analyte in a medium when the analyte is a member of a specific binding pair. The methods and labels provide procedures for reducing background and increasing sensitivity. The binding partner of the analyte is labeled with a substance, the stability of which detectably changes whenever said analyte is bound as a member of the specific binding pair. In a closely related system, the analyte is labeled with a substance susceptible to differential degradation depending on whether or not the analyte is bound as a member of its specific binding pair. After incubation and selective degradation or chemical or biochemical alteration, the amount of analyte bound is detected by measuring either the stability change or the extent of degradation of the label. In a particular system, chemiluminescent acridinium ester labeled *probes"*** are used in a homogenous

*hybridization"*** assay format for sensitively detecting the presence of complement any target *polynucleotide"*** sequences.

ABSTRACT WORD COUNT: 161

LANGUAGE (Publication, Procedural, Application): English; English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF2 2173
SPEC A (English) EPABF2 9074
Total word count - document A 11247
Total word count - document B 0
Total word count - documents A + B 11247

5/3,AB/8 (Item 8 from file: 348)
DIALOG(R)File 348:European Patents
(c) 2000 European Patent Office. All rts. reserv.

00655738

Method, *reagents"*** and kits for detection of neisseria gonorrhoea. Verfahren, Reagenzien und Testkits zur Detektion von Neisseria Gonorrhoea. Procede, reactifs et kits de tests pour detection de neisseria gonorrhoea. PATENT ASSIGNEE:

F. HOFFMANN-LA ROCHE AG, (200573), Grenzacherstrasse 124, CH-4002 Basel, (CH), (applicant designated states:

AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL; PT)

INVENTOR

Purohit, Ashok Purushottm, 105 Everett Close, Sommerville, N.J. 08876, (US)

Silver, Sheryl Beth, 745 Walnut Street, Paramus, N.J. 07652, (US) LEGAL REPRESENTATIVE:

EP 630971 A3 951025

APPLICATION (CC, No, Date): EP 94108997 940613;

PRIORITY (CC, No, Date): US 82851 930623; US 214861 940317

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; NL; PT

INTERNATIONAL PATENT CLASS: C12Q-001/68; C12Q-001/68; C12R-001/36; C12Q-001/68; C12R-001/01

ABSTRACT EP 630971 A2

Disclosed are methods, *reagents"*** and kits for detecting Neisseria gonorrhoeae, as well as methods, *reagents"*** and kits for *detecting"*** Neisseria gonorrhoeae and/or *Chlamydia"*** trachomatis, in fluid samples, using *primers"*** and *probes"*** specific for each bacterial species.

ABSTRACT WORD COUNT: 38

LANGUAGE (Publication, Procedural, Application): English; English; English

Available Text Language Update Word Count

CLAIMS A (English) EPABF2 1370

SPEC A (English) EPABF2 8039

Total word count - document A 9409

Total word count - document B 0

Total word count - documents A + B 9409

5/3,AB/9 (Item 9 from file: 348) DlALOG(R)File 348:European Patents

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00642911

Nucleic acid assay procedure.

Verfahren zum Nukleinsaurenachweis.

Procede de dosage d'acide nucleique.

PATENT ASSIGNEE:

BECTON, DICKINSON AND COMPANY, (208885), 1 Becton Drive, Franklin Lakes, NJ 07417-1880, (US), (applicant designated states: BE;DE;FR;GB;IT;NL) INVENTOR:

Nycz, Colleen Marie, 6412 Pernod Way, Raleigh, North Carolina 27613, (US) Vonk, Glenn P., 2717 Piney-Grove Wilbon Road, Fuquay-Varina, North Carolina 27526, (US)

Jurgensen, Stewart Russell, 7504 Valley Run Drive, Raleigh, North Carolina 27615, (US)

Myatich, Ronald G,., 500 Woodcroft Parkway 18A, Durham, North Carolina 27113, (US)

LEGAL REPRESENTATIVE:

Rambelli, Paolo et al (55471), Jacobacci & Perani S.p.A., Corso Regio Parco 27, I-10152 Torino, (IT)

PATENT (CC, No, Kind, Date): EP 622464 A2 941102 (Basic)

EP 622464 A3 950524

APPLICATION (CC, No, Date): EP 94105098 940331;
PRIORITY (CC, No, Date): US 50683 930416
DESIGNATED STATES: BE; DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: C12Q-001/68;

ABSTRACT EP 622464 A2

A method of detecting the presence of a target *polynucleotide"*** in a sample is disclosed. The method comprises the steps of *hybridizing"*** the target *polynucleotide"*** with a detector *probe"***, the detector *probe"*** comprising a first oligonucleotide having a detectable group such as alkaline phosphatase attached to the 3' terminus thereof; *hybridizing"*** the target *polynucleotide"*** with a capture *probe"***, the capture *probe"*** comprising a second oligonucleotide having a capture group such as biotin attached to the 5' terminus thereof; and detecting the *hybridization"*** of the detector *probe"*** and the capture *probe"*** to the target *polynucleotide"***. *Probes"***, *probe"*** sets, and kits useful for carrying out the invention are also disclosed. (see image in original document)

ABSTRACT WORD COUNT: 115

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF2 439
SPEC A (English) EPABF2 4824
Total word count - document A 5263
Total word count - document B 0
Total word count - documents A + B 5263

5/3,AB/10 (Item 10 from file: 348)
DIALOG(R)File 348:European Patents
(c) 2000 European Patent Office. All rts. reserv.

00630642 ASSAY METHODS ANALYTISCHES VERFAHREN METHODES D'ANALYSE PATENT ASSIGNEE:

Vysis, Inc., (2197200), 3100 Woodcreek Drive, Downers Grove, Illinois 60515, (US), (Proprietor designated states: all)

INVENTOR:

SHAH, Jyotsna, 14 Preserve Drive, Nashua, NH 03060, (US)
KING, Walter, 8 Fairfax Drive, Andover, MA 01810, (US)
LIU, Jing, 53 Bedford Street, Waltham, MA 02154, (US)
SMITH, James, 237-1 South Street, Shrewsbury, MA 01545, (US)
SERPE, Eugene, 865 Lockland Avenue, Winston-Salem, NC 27103, (US)
POPOFF, Sonya, 53 Lake Road, Wayland, MA 01778, (US)
Searcher: Shears 308-4994

Land Care of Land Control

LEGAL REPRESENTATIVE:

White, Martin Paul et al (74783), Kilburn & Strode, 20 Red Lion Street, London WC1R 4PJ, (GB)

PATENT (CC, No, Kind, Date): EP 625213 A1 941123 (Basic)

EP 625213 B1 991229

WO 9410335 940511

EP 94909402 931008; WO 93US9703 931008 APPLICATION (CC, No, Date):

PRIORITY (CC, No, Date): US 959939 921009

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: C12Q-001/68

NOTE:

No A-document published by EPO

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text	_LanguageUpdate	Word-Count-
- CLAIMS B	(English) 199952	1188
CLAIMS B	(German) 199952	1028
CLAIMS B	(French) 199952	1293
SPEC B	(English) 199952	9766
Total word coun	t - document A	0
Total word coun	t - document B	13275
Total word coun	t - documents A + B	13275

(Item 11 from file: 348) 5/3,AB/11

DIALOG(R) File 348: European Patents

(c) 2000 European Patent Office. All rts. reserv.

00588214

*Detection"*** of a unique *Chlamydia"*** strain associated with acute respiratory disease.

Nachweis eines mit Atmungskrankheiten verbundenen Einzelstammes von Chlamydia.

*Detection"*** d'une souche unique de *Chlamydia"*** associee a des maladies respiratoires aigues.

PATENT ASSIGNEE:

WASHINGTON RESEARCH FOUNDATION, (653755), 4225 Roosevelt Way N.E. Suite 303, Seattle, WA 98105, (US), (applicant designated states:

AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

INVENTOR:

Grayston, Thomas J., 3844 - 49 th Avenue N.E., Seattle Washington 98105,

Kuo, Cho-Chou, 6531 - 29th Avenue N.E., Seattle Washington 98115, (US) Wang, San-pin, 2050 - 182nd Avenue N.E., Redmond Washington 98052, (US) Campbell, Lee Ann, 17515 - 8th Avenue N.E., Seattle Washington 98155, (US)

LEGAL REPRESENTATIVE:

Bizley, Richard Edward et al (28353), Hepworth, Lawrence, Bryer & Bizley Merlin House Falconry Court Baker's Lane, Epping Essex CM16 5DQ, (GB) Shears Searcher : 308-4994

PATENT (CC, No, Kind, Date): EP 577144 Al 940105 (Basic)
APPLICATION (CC, No, Date): EP 93110955 870501;
PRIORITY (CC, No, Date): US 858380 860501
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE
RELATED PARENT NUMBER(S) - PN (AN):
EP 264434 (EP 879031979)
INTERNATIONAL PATENT CLASS: C120-001/68;

ABSTRACT EP 577144 A1

Methods for *detecting"*** a unique strain of *Chlamydia"*** associated with acute respiratory disease. These methods utilize monoclonal antibody directed against an antigenic determinant of the TWAR organism, or DNA *probes"*** capable of specifically *hybridizing"*** to at least a portion of the DNA sequence of the TWAR organism. A method for determining the presence of antibodies to the TWAR organism, utilizing elementary bodies of the TWAR organism as antigen is also disclosed.

ABSTRACT WORD COUNT: 73

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF2 510
SPEC A (English) EPABF2 7450
Total word count - document A 7960
Total word count - document B 0
Total word count - documents A + B 7960

5/3,AB/12 (Item 12 from file: 348)
DIALOG(R)File 348:European Patents
(c) 2000 European Patent Office All rts rese

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00583287

AMPLIFICATION OF TARGET NUCLEIC ACIDS USING GAP FILLING LIGASE CHAIN REACTION

AMPLIFIZIERUNG VON ZIELNUKLEINSAUREN UNTER VERWENDUNG DER "GAP FILLING LIGASE"-REAKTION

AMPLIFICATION D'ACIDES NUCLEIQUES CIBLES PAR LA REACTION DE LA LIGASE COMBLANT DES ESPACES VIDES

PATENT ASSIGNEE:

ABBOTT LABORATORIES, (225073), One Abbott Park Road, Abbott Park, Illinois 60064-3500, (US), (Proprietor designated states: all) INVENTOR:

BIRKENMEYER, Larry, G., 5303 W. Leland, Chicago, IL 60630, (US)
CARRINO, John, J., 5212 Solomon Court, Gurnee, IL 60031, (US)
DILLE, Bruce, L., 40841 N. Nevelier Drive, Antioch, IL 60002, (US)
HU, Hsiang-Yun, 1763 Cedar Glen Drive, Libertyville, IL 60048, (US)
KRATOCHVIL, Jon, David, 7101 Fifth Avenue, Kenosha, WI 53143, (US)
LAFFLER, Thomas, G., 1964 Pinehurst Court, Libertyville, IL 60048, (US)
Searcher: Shears 308-4994

MARSHALL, Ronald, L., 900 Winthrop Court, Zion, IL 60099, (US) RINEHARDT, Laurie, A., 8104 65th Avenue, Kenosha, WI 53142, (US) SOLOMON, Natalie, A., 467 Thorndale Drive, Buffalo Grove, IL 60089, (US) LEGAL REPRESENTATIVE: Modiano, Guido, Dr.-Ing. et al (40786), Modiano, Josif, Pisanty & Staub, Baaderstrasse 3, 80469 Munchen, (DE) PATENT (CC, No, Kind, Date): EP 596918 A1 940518 (Basic) EP 596918 A1 940824 EP 596918 B1 990915 WO 9300447 930107 APPLICATION (CC, No, Date): EP 92915297 920626; WO 92US5477 920626 PRIORITY (CC, No, Date): US 722798 910628 DESIGNATED STATES: DE; ES; FR; IT INTERNATIONAL PATENT CLASS: C12Q-001/68; C12N-015/10; C12P-019/34; C07H-021/04 NOTE: No A-document published by EPO LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY: Available Text Language Update Word Count CLAIMS B (English) 9937 1105 (German) 9937 CLAIMS B 1143 CLAIMS B (French) 9937 1263 SPEC B (English) 9937 12688 Total word count - document A Total word count - document B 16199 Total word count - documents A + B 16199 5/3,AB/13 (Item 13 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 00546287 *Probes"*** to chlamydia trachomatis. Sonden fur Chlamydia Trachomatis. Sondes pour chlamydia trachomatis. PATENT ASSIGNEE: BECTON, DICKINSON & COMPANY, (208882), One Becton Drive, Franklin Lakes New Jersey 07417-1880, (US), (applicant designated states: DE;FR;GB;SE) INVENTOR: Malinowski, Douglas Peter, Route 6, Box 696, Dinmocks Mill Road, Hillsborough, NC 27278, (US) Fraiser, Melinda Susan, 104 East Maynard Avenue, Durham, NS 27704, (US) Jurgensen, Stewart R., 7504 Valley Run Drive, Raleigh NC 27615, (US) LEGAL REPRESENTATIVE: Ruffles, Graham Keith et al (43041), MARKS & CLERK 57-60 Lincoln's Inn Fields, London WC2A 3LS, (GB)

PATENT (CC, No, Kind, Date): EP 546761 A1 930616 (Basic)

Searcher

:

Shears

APPLICATION (CC, No, Date): EP 92310998 921202;

PRIORITY (CC, No, Date): US 806933 911211

DESIGNATED STATES: DE; FR; GB; SE

INTERNATIONAL PATENT CLASS: C12Q-001/68;

ABSTRACT EP 546761 A1

The invention provides methods and nucleic acid *probes"*** for *detecting"*** and isolating sequences of *Chlamydia"*** Trachomatis. The *probes"*** can recognize all fifteen serotypes of C. trachomatis.

ABSTRACT WORD COUNT: 28

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) EPABF1 766 SPEC A (English) EPABF1-45-3-6-

Total word count - document A 5302 Total word count - document B 0

Total word count - documents A + B 5302

5/3,AB/14 (Item 14 from file: 348)

DIALOG(R) File 348: European Patents

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00500385

NOTE:

DNA-DEPENDENT RNA POLYMERASE TRANSCRIPTS AS REPORTER MOLECULES FOR SIGNAL AMPLIFICATION IN NUCLEIC ACID *HYBRIDIZATION"*** ASSAYS

RNS-POLYMERASE-TRANSKRIPTE DNS-ABHANGIGE ALS REPORTERMOLEKULE SIGNALVERSTARKUNG IN NUKLEINSAURE-*HYBRIDISIERUNGSUNTERSUCHUNGEN"***

TRANSCRIPTIONS D'ARN-POLYMERASE DEPENDANTE D'ADN SERVANT DE MOLECULES POUR L'AMPLIFICATION DE SIGNAUX DANS LES ANALYSES D'HYBRIDATION D'ACIDE NUCLEIQUE

PATENT ASSIGNEE:

Chiron Diagnostics Corporation, (2239360), 333 Coney Street, East Walpole, MA 02032, (US), (Proprietor designated states: all) INVENTOR:

URDEA, Michael, S., 100 Bunce Meadow Road, Alamo, CA 94507, (US) LEGAL REPRESENTATIVE:

Goldin, Douglas Michael et al (31061), J.A. KEMP & CO. 14 South Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 510085 A1 921028 (Basic)

EP 510085 A1 930324 EP 510085 B1 990908

WO 9110746 910725

APPLICATION (CC, No, Date): EP 91903073 910110; WO 91US213 910110 PRIORITY (CC, No, Date): US 463022 900110 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: C12Q-001/68; C07H-015/12; C12N-015/00

> Shears 308-4994 Searcher :

No A-document published by EPO LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY: Available Text Language Update Word Count 9936 CLAIMS B (English) 3525 CLAIMS B (German) 9936 3321 (French) 9936 CLAIMS B 3638 SPEC B (English) 9936 10599 Total word count - document A Total word count - document B 21083 Total word count - documents A + B 21083 (Item 15 from file: 348) 5/3,AB/15 DIALOG(R) File 348: European Patents-(c) 2000 European Patent Office. All rts. reserv. 00446125 SOLID PHASE DIAGNOSIS OF MEDICAL CONDITIONS FESTPHASENDIAGNOSE VON MEDIZINISCHEN KONDITIONEN DIAGNOSTIC EN PHASE SOLIDE DE CONDITIONS MEDICALES PATENT ASSIGNEE: CEMU BIOTEKNIK AB, (1082941), Banergatan 21, S-752 37 Uppsala, (SE), (applicant designated states: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE) INVENTOR: UHLEN, Mathias, Kvarnbogatan 30, S-752 39 Uppsala, (SE) LEGAL REPRESENTATIVE: Dzieglewska, Hanna Eva et al (73231), Frank B. Dehn & Co., European Patent Attorneys, 179 Queen Victoria Street, London EC4V 4EL, (GB) PATENT (CC, No, Kind, Date): EP 464067 A1 920108 (Basic) EP 464067 B1 WO 9011369 901004 APPLICATION (CC, No, Date): EP 90904803 900315; WO 90EP454 PRIORITY (CC, No, Date): GB 8906641 890322; GB 8906642 890322 DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: C12Q-001/68; NOTE: No A-document published by EPO LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY: Available Text Language Update Word Count CLAIMS B (English) EPAB97 1108 CLAIMS B (German) 1051 EPAB97 CLAIMS B (French) EPAB97 1145 SPEC B (English) EPAB97 11680 Total word count - document A 0 Total word count - document B 14984 Total word count - documents A + B 14984

5/3,AB/16 (Item 16 from file: 348)

DIALOG(R) File 348: European Patents

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00422904

Nucleic acid amplification employing ligatable hairpin *probe"*** and transcription.

Nukleinsaure-Amplifikation unter Verwendung von ligierter Haarnadelsonde und Transkription.

Amplification d'acide nucleique employant une sonde liante en forme d'epingle a cheveux et transcription.

PATENT ASSIGNEE:

MOLECULAR DIAGNOSTICS, INC., (594530), 400 Morgan Lane, West Haven, CT

06516, (US), (applicant designated states:

AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE)

INVENTOR:

Dattagupta, Nanibhushan, 470 Prospect Street, New Haven, CT 06511, (US) LEGAL REPRESENTATIVE:

Danner, Klaus, Dr. et al (51861), c/o Bayer AG Konzernverwaltung RP

PATENT (CC, No, Kind, Date): EP 427073 A2 910515 (Basic)

EF 427073 A2 310313 (Ba)

EP 427073 A3 910828

APPLICATION (CC, No, Date): EP 90120650 901027;

PRIORITY (CC, No, Date): US 434372 891109; US 569991 900823

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; GR; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: C12Q-001/68; C12N-015/10;

ABSTRACT EP 427073 A2

The present invention relates to methods for amplicfying nucleic acid sequences. In particular, the invention concerns methods for detecting the presence of a particular nucleic acid sequences with high sensitivity.

ABSTRACT WORD COUNT: 34

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Update Word Count
CLAIMS A (English) EPABF1 506
SPEC A (English) EPABF1 6011
Total word count - document A 6517
Total word count - document B 0
Total word count - documents A + B 6517

5/3, AB/17 (Item 17 from file: 348)

JIALOG(R) File 348: European Patents

(c) 2000 European Patent Office. All rts. reserv.

00420920

METHOD AND KIT FOR DETECTING A TARGET NUCLEIC ACID USING A CAPTURE *PROBE"*** BOUND TO A POLYSTYRENE SUPPORT VIA AN INTERMEDIARY PROTEIN.

VERFAHREN UND SATZ FUR DIE DETEKTION VON ZIEL NUKLEIN SAUREN UNTER VERWENDUNG EINER FANGSONDE DIE UBER EIN ZWISCHENPROTEIN AN EINE POLYSTYRENE OBERFLACHE GEKOPPELT IST.

PROCEDE ET TROUSSE POUR LA DETECTION ACIDES NUCLEIQUES CIBLES EN UTILISANT DES SONDES DE CAPTURE IMMOBILISES SUR UN SUPPORT DE POLYSTYRENE PAR UNE PROTEINE INTERMEDIAIRE.

PATENT ASSIGNEE:

F. Hoffmann-La Roche AG, (200574), , 4002 Basel, (CH), (Proprietor designated states: all)

INVENTOR:

Longiaru, Mathew, 5 Weber Road, West Orange, N.J. 07052, (US)

Silver, Sheryl Beth, 1590 Anderson Avenue, Fort Lee, N.J. 07024, (US)

Sulzinski, Michael Anthony, 61 Alan Road, Spring Valley, N.Y. 10977, (US)

LEGAL REPRESENTATIVE:

Lederer, Franz, Dr. et al (7431), Lederer, Keller & Riederer Patentanwalte Prinzregentenstrasse 16, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 420260 A2 910403 (Basic)

EP 420260 A3 910918

EP 420260 B1 991208

APPLICATION (CC, No, Date): EP 90118620 900927;

PRIORITY (CC, No, Date): US 414542 890929

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FR; GB; IT; LI; NL; SE

RELATED DIVISIONAL NUMBER(S) - PN (AN):

EP 875583 (EP 98111076)

INTERNATIONAL PATENT CLASS: C12Q-001/68; C07H-021/04

ABSTRACT EP 420260 A2

A format for *hybridization"*** capture of PCR amplified DNA on a solid support is provided. After labelling the amplified target DNA with biotin during amplification, the labelled DNA is specifically captured by base-pair *hybridization"*** to an amplicon-specific oligonucleotide capture *probe"*** which is bound to a solid support and the labeled DNA is detected with a biotin dependent chromogenic detection assay. In a specific format selected *primers"*** and *probes"*** are disclosed which enable the *detection"*** of *Chlamydia"*** trachomatis.

ABSTRACT WORD COUNT: 81

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text Language Word Count Update CLAIMS B (English) 9949 854 CLAIMS B (German) 9949 729 CLAIMS B (French) 9949 958 SPEC B (English) 9949 7407 Total word count - document A 0 Total word count - document B 9948

Total word count - documents A + B

5/3,AB/18 (Item 18 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv.

00370129

RNA template end-linked *probe"*** constructs and methods for use RNS-Template mit endverbundener Sonde und Verfahren zur Verwendung Sonde liee a la terminaison d'un moule d'ARN et procedes d'utilisation PATENT ASSIGNEE:

AMOCO CORPORATION, (683002), 200 East Randolph Drive P.O. Box 87703, Chicago Illinois 60680-0703, (US), (applicant designated states: DE; FR; GB; IT) INVENTOR:

Stefano, James E., 40-10 Briarwood Lane, Marlboro, MA 01752, (US) LEGAL REPRESENTATIVE:

Sheard, Andrew Gregory et al (50962), Kilburn & Strode 30, John Street, London WC1N 2DD, (GB)

PATENT (CC, No, Kind, Date): EP 361983 A2 900404 (Basic)

EP 361983 A3 910403

EP 361983 B1 960515

APPLICATION (CC, No, Date): EP 89310066 891002;

PRIORITY (CC, No, Date): US 252243 880930; US 370218 890622

DESIGNATED STATES (Pub A): AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL;

SE; (Pub B): DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: C12Q-001/68;

ABSTRACT EP 361983 A2

New *probes"*** are provided for the detection of target RNA comprising RNA templates replicated by Q-beta replicase having a target specific *probe"*** attached through specific sequences at both the template's 3(min) and 5(min) ends whereby *hybridization"*** of the *probe"*** with target results in the formation of a cleavage inducible ribozyme. Following cleavage, the RNA template may be advantageously amplified by Q-beta replicase resulting in the generation of a large signal correlatable to the presence of RNA target in the sample. Suitable methods employing such *probes"*** are also provided.

ABSTRACT WORD COUNT: 92

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS A (English) EPABF1 2869 CLAIMS B (English) EPAB96 1101 CLAIMS B (German) EPAB96 937 CLAIMS B (French) EPAB96 1197 SPEC A (English) EPABF1 10252

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SPEC B
                 (English) EPAB96
                                      10465
 Total word count - document A
                                      13121
 Total word count - document B
                                      13700
 Total word count - documents A + B
                                      26821
  5/3,AB/19
                (Item 19 from file: 348)
 DIALOG(R) File 348: European Patents
 (c) 2000 European Patent Office. All rts. reserv.
 00340335
 Synthetic
            oligonucleotides
                                useful
                                         for
                                               the
                                                      *determination"***
     *Chlamydia"*** trachomatis in a biological sample.
Synthetische Oligonucleotide zum Nachweis von Chlamydia trachomatis in
    einer biologischen *Probe"***.
--Oligonucleotides synthetiques pour *detecter"*** *chlamydia"*** trachomatis
    dans un echantillon biologique.
PATENT ASSIGNEE:
  SCLAVO S.p.A., (658420), Via Fiorentina 1, I-53100 Siena, (IT),
     (applicant designated states: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE)
INVENTOR:
  Ratti, Giulio, Via Strada di Vico Alto, 6, I-53100 Siena, (IT)
  Comanducci, Maurizio, Via Massetana Romana, 12/A, I-53100 Siena, (IT)
  Ricci, Stefano, Via Massetana, 13, I-53100 Siena, (IT)
  Garuti, Giancarlo, Via C. Prampolini, 2/A, I-42048 Rubiera (Reggio Emilia),
     (IT)
  Cosco, Egidio, Via Puglie, 11, I-53100 Siena, (IT)
LEGAL REPRESENTATIVE:
  Gervasi, Gemma et al (40513), NOTARBARTOLO & GERVASI Srl Viale Bianca
    Maria 33, I-20122 Milan, (IT)
PATENT (CC, No, Kind, Date): EP 336412 A2 891011 (Basic)
                               EP 336412 A3 910731
APPLICATION (CC, No, Date):
                               EP 89106059 890406;
PRIORITY (CC, No, Date): IT 8820132 880408
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: C12Q-001/68;
ABSTRACT EP 336412 A2
    The nucleotide sequence of the PCHL1 plasmid which is specific to
  Chlamydia trachomatis (CT) is reported. Synthetic oligonucleotides with
  sequences homologous or corresponding to a region of at least 10
  consecutive nucleotide bases selected from the sequence of the plasmid
  are particularly useful for the determination of CT in a biological
  sample.
ABSTRACT WORD COUNT: 56
LANGUAGE (Publication, Procedural, Application): English; English; Italian
FULLTEXT AVAILABILITY:
Available Text Language
                            Update
                                      Word Count
```

Searcher

Shears

308-4994

CLAIMS A (English) EPABF1 654 SPEC A (English) EPABF1 5116 Total word count - document A 5770 Total word count - document B Total word count - documents A + B 5770

5/3,AB/20 (Item 20 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv.

00316701

Homogeneous protection assay. Homogener Abschirmungstest.

Essai homogene protecteur.

- PATENT ASSIGNEE:

GEN-*PROBE"*** INCORPORATED, (690910), 9880 Campus Point Drive, San Diego California 92121-1514, (US), (applicant designated states: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INVENTOR:

Arnold, Lyle John, 5439 Noah Way, San Diego, CA 92117, (US) Nelson, Norman C., 3639 Marlesta Drive, San Diego, CA 92111, (US) LEGAL REPRESENTATIVE:

Goldin, Douglas Michael et al (31061), J.A. KEMP & CO. 14, South Square Gray's Inn, London WC1R 5LX, (GB)

PATENT (CC, No, Kind, Date): EP 309230 A2 890329 (Basic)

EP 309230 A3 900711 EP 309230 B1 950621

APPLICATION (CC, No, Date): EP 88308767 880921;

PRIORITY (CC, No, Date): US 99392 870921

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE INTERNATIONAL PATENT CLASS: G01N-033/542; C12Q-001/68; G01N-033/574; G01N-033/532; C07H-021/00;

ABSTRACT EP 309230 A2

Improved homogenous diagnostic assay methods and labels for detecting an analyte in a medium when the analyte is a member of a specific binding pair. The methods and labels provide procedures for reducing background and increasing sensitivity. The binding partner of the analyte is labeled with a substance, the stability of which detectably changes whenever said analyte is bound as a member of the specific binding pair. In a closely related system, the analyte is labeled with a substance susceptible to differential degradation depending on whether or not the analyte is bound as a member of its specific binding pair. After incubation and selective degradation or chemical or biochemical alteration, the amount of analyte bound is detected by measuring either the stability change or the extent of degradation of the label. In a particular system, chemiluminescent acridinium ester labeled *probes"*** are used in a homogenous *hybridization"*** assay format for sensitively detecting the presence of

09/428122

complement any target *polynucleotide"*** sequences.
ABSTRACT WORD COUNT: 163

LANGUAGE (Publication, Procedural, Application): English; English; FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	1935
. CLAIMS B	(English)	EPAB95	1635
CLAIMS B	(German)	EPAB95	1584
CLAIMS B	(French)	EPAB95	1836
SPEC A	(English)	EPABF1	8915
SPEC B	(English)	EPAB95	9025
Total word count	: - document	: A	1.0.850
Total word count	: - document	: В	14080
Total-word-count	- documen t	s A + B	24930
and the second s			

5/3,AB/21 (Item 21 from file: 348)

DIALOG(R) File 348: European Patents

(c) 2000 European Patent Office. All rts. reserv.

00272854

Nucleic acid probes for detection and/or quantitation of non-viral organisms

Nukleinsauresonden zum Nachweis und/oder zur Quantifizierung von nicht-viralen Organismen

Sondes d'acides nucleiques pour la detection et pour l'analyse quantitative d'organismes non viraux

PATENT ASSIGNEE:

Gen-*Probe"*** Incorporated, (690916), 10210 Genetic Center Drive, San Diego, CA 92121, (US), (applicant designated states:

AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INVENTOR:

Hogan, James J., 1038 Olive Lane, Coronado, California 92118, (US)
Smith, Richard D., 890 Denford Crescent, Victoria, British Columbia
V8X4N1, (CA)

Kop, JoAnn, 36101 Malta Place, Fremont, California 94536, (US)
McDonough, Sherrol H., 5005 Maynard Street, San Diego, California 92122,
 (US)

LEGAL REPRESENTATIVE:

Maschio, Antonio et al (77501), D Young & Co, 21 New Fetter Lane, London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 272009 A2 880622 (Basic)

EP 272009 A3 891102

EP 272009 B1 980304

APPLICATION (CC, No, Date): EP 87310363 871124;

PRIORITY (CC, No, Date): US 934244 861124; US 83542 870807

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12Q-001/68; G01N-033/53; C12Q-001/04;

C12Q-001/00; C07H-021/00; C12P-019/34

ABSTRACT EP 272009 A2

A method for preparing probes, as well as several probes for use in qualitative or quantitative hybridization assays are disclosed. The method comprises constructing an oligonucleotide that is sufficiently complementary to hybridize to a region of rRNA selected to be unique to a non-viral organism or group of non-viral organisms sought to be detected, said region of rRNA being selected by comparing one or more variable region rRNA sequences of said non-viral organism or group of non-viral organisms with one or more variable region rRNA sequences from one or more non-viral organisms sought to be distinguished. Hybridization assay probes for Mycobacterium avium, Mycobacterium intracellulare, the Mycobacterium tuberculosis-complex bacteria, Mycoplasma pneumoniae, Legionella, Salmonella, Chlamydia trachomatis, Campylobacter, Proteus mirabilis, Enterococcus, Enterobacter cloacae, E. coli, Pseudomonas group I, Neisseria gonorrhoeae, bacteria, and fungi also are disclosed.

ABSTRACT WORD COUNT: 137

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS B (English) 9810 16670 CLAIMS B (German) 9810 14925 CLAIMS B (French) 9810 17312 SPEC B (English) 9810 18905 Total word count - document A 0 Total word count - document B 67812 Total word count - documents A + B 67812

(Item 22 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv.

00216820

method and *probe"*** for the detection of Actinobacillus Actinomycetemcomitans.

Verfahren und Sonde zum Nachweis von Actinobacillus Actinomycetemcomitans. Procede detecter des cellules Actinobacillus et sonde pour Actinomycetemcomitans.

PATENT ASSIGNEE:

OMNIGENE INC, (1536532), 763D Concorde Avenue, Cambridge Massachusetts 02139-9002, (US), (applicant designated states:

AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

INVENTOR:

Then, Michael C., Four Lawn Avenue, Lexington, MA 02173, (US) Chen, Pearl M., Four Lawn Avenue, Lexington, MA 02173, (US) Klotz, Lynn C., 26 John F. Kennedy Street, Apt. no. 3, Cambridge, MA Shears Searcher 308-4994 :

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02138, (US)
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LEGAL REPRESENTATIVE:

Deans, Michael John Percy et al (30021), Lloyd Wise, Tregear & CO. Norman House 105-109 Strand, London WC2R OAE, (GB)

PATENT (CC, No, Kind, Date): EP 199439 A1 861029 (Basic)

EP 199439 B1 930908

APPLICATION (CC, No, Date): EP 86301490 860303;

PRIORITY (CC, No, Date): US 707054 850301; US 769565 850826

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12Q-001/68;

ABSTRACT EP 199439 A1

A *probe"*** for the detection, in a sample obtained from the mouth of a human patient, of a microbial or human cell associated with a human oral medical disorder, consists essentially of a segment of DNA or RNA capable of selectively *hybridizing"***, under *hybridizing"*** conditions to single-stranded DNA of the cell.

ABSTRACT WORD COUNT: 55

LANGUAGE (Publication, Procedural, Application): English; English; English FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	372
CLAIMS B	(German)	EPBBF1	392
CLAIMS B	(French)	EPBBF1	410
SPEC B	(English)	EPBBF1	3671
Total word cour	nt - documen	nt A	0
Total word cour	nt - documen	nt B	4845
Total word cour	nt - documen	nts A + B	4845

5/3,AB/23 (Item 23 from file: 348)

DIALOG(R) File 348: European Patents

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00196076

Chlamydia major outer membrane protein Hauptprotein der Aussenmembran von Chlamydia Proteine principale de la membrane externe de Chlamydia PATENT ASSIGNEE:

CHIRON CORPORATION, (572530), 4560 Horton Street, Emeryville, California 94608, (US), (applicant designated states:

AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

WASHINGTON RESEARCH FOUNDATION, (653754), 4225 Roosevelt Way, N.E., Suite 303, Seattle, WA 98105-6099, (US), (applicant designated states:

AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE)

INVENTOR:

Agabian, Nina, 3 Burnett Avenue N., No. 5, San Francisco California 94131 , (US)

Stephens, Richard, 2715 W. Blaine, Seattle Washington 98199, (US)
Kuo, Cho-Chou, 6531 29th Avenue N.E. Seattle, Washington 98115, (US)
Mullenbach, Guy T., 309 63rd Street No. C, Oakland, California 94618,
(US)

LEGAL REPRESENTATIVE:

Glawe, Delfs, Moll & Partner (100692), Patentanwalte Postfach 26 01 62, 80058 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 192033 A2 860827 (Basic)

EP 192033 A3 880504

EP 192033 B1 960925

APPLICATION (CC, No, Date): EP 86100279 860110;

PRIORITY (CC, No, Date): US 692001 850114

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C12N-015/31; C12P-021/02; A61K-039/118;

-C12Q-001/68;-G01N-033/569;-

ABSTRACT EP 192033 A2

Chlamydia major outer membrane protein.

Methods and compositions are provided for the production of a polypeptide which is immunologically cross-reactive with a naturally-occurring major outer membrane protein (MOMP) of Chlamydia trachomatis. A DNA construct including a replication system recognized by E. coli, and an MOMP gene under the transcriptional control of a b-galactosidase promoter and terminator is provided.

Recombinant phage (lambda)gt11/L2/33 was deposited at the American Type Culture Collection, 12301 Parklawn Drive, Rockville, Maryland 20852, on January 10, 1985 and granted accession no. 40157. L2 B9-F DNA was deposited at the American Type Culture Collection on December 31, 1985, and granted accession no 40217.

ABSTRACT WORD COUNT: 106

LANGUAGE (Publication, Procedural, Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text Language Update Word Count CLAIMS B (English) EPAB96 1284 CLAIMS B (German) EPAB96 1200 CLAIMS B (French) EPAB96 1461 SPEC B (English) EPAB96 5417 Total word count - document A Total word count - document B 9362 Total word count - documents A + B 9362

5/3,AB/24 (Item 1 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
:c. 2000 Derwent Publ Ltd. All rts. reserv.

0257650 DBA Accession No.: 2000-12140 PATENT
Novel Chlamydia *polynucleotides"*** and polypeptide, useful for diagnosis,
Searcher: Shears 308-4994

prevention and treatment of Chlamydia infection in mammals - vector-mediated Chlamydia pneumoniae gene transfer and expression in host cell, antisense oligonucleotide, DNA *probe"***, DNA *primer"*** and antibody for recombinant vaccine and gene therapy

AUTHOR: Murdin A D; Oomen R P; Wang J; Dunn P

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200039157 PATENT DATE: 20000706 WPI ACCESSION NO.:

2000-452368 (2039)

PRIORITY APPLIC. NO.: US 141271 APPLIC. DATE: 19990630 NATIONAL APPLIC. NO.: WO 99CA1224 APPLIC. DATE: 19991222

LANGUAGE: English

ABSTRACT: A nucleic acid molecule containing a nucleic acid sequence which encodes a Chlamydia sp. (preferably Chlamydia pneumoniae) protein of 515 amino acids or an immunogenic fragment containing 12 consecutive amino acids or a sequence 75% identical to the sequence is new. Also claimed are: an antisense oligonucleotide; a nucleic acid which encodes a fusion protein containing the protein and an additional protein; a unicellular host cell; a DNA *probe"***; a DNA *primer"***; a Chlamydia sp. protein; preparation of the protein; an antibody; a vaccine; a diagnostic kit; a method for identifying the Chlamydia sp. protein; an expression plasmid pCAI640; and an ATP/ADP translocase from Chlamydia sp. The protein, vaccine or antibody s useful got preventing or treating Chlamydia sp. infection. The protein or antibody are useful in the *detection"*** of *Chlamydia"*** sp. infection. DNA *primers"*** or DNA *probes"*** derived from the nucleic acid are useful in diagnostic tests for *detecting"*** *Chlamydia"*** sp. infection. (81pp)

5/3,AB/25 (Item 2 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 2000 Derwent Publ Ltd. All rts. reserv.

0255500 DBA Accession No.: 2000-09990 PATENT

Novel Chlamydia POMP91B precursor protein antigen, used for vaccination and protection against Chlamydia infection - plasmid pCAI632-mediated gene transfer and expression in host cell, antibody and DNA *probe"*** for Chlamydia pneumoniae infection therapy, nucleic acid vaccine and gene therapy

AUTHOR: Murdin A D; Oomen R P; Dunn P L

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200026239 PATENT DATE: 20000511 WPI ACCESSION NO.:

2000-365571 (2031)

PRIORITY APPLIC. NO.: US 430723 APPLIC. DATE: 19991029 NATIONAL APPLIC. NO.: WO 99GB3622 APPLIC. DATE: 19991102

LANGUAGE: English

ABSTRACT: A *polynucleotide"*** (3,150 bp) encoding a Chlamydia pneumoniae POMP91B precursor antigen (973 amino acids) is new. Also claimed are:

Searcher: Shears 308-4994

the protein; an expression cassette containing the *polynucleotide"*** linked to a promoter; an expression vector (e.g. plasmid pCAI632) containing the expression cassette; a host cell; producing the protein; a nucleic acid vaccine containing the expression cassette; a DNA *probe"*** capable of *detecting"*** the presence of *Chlamydia"*** sp. in a biological material; *detecting"*** the presence of *Chlamydia"*** sp.; affinity chromatography purifying the protein; and an antibody. The POMP91B precursor protein and *polynucleotide"*** can be used as vaccines for immunization, to provide protection against Chlamydia sp. infections, especially Chlamydia pneumoniae infections. The nucleic acid vaccine, the protein and Chlamydia sp. antigens can be used in the preparation of pharmaceutical compositions. (97pp)

5/3,AB/26 (Item 3 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 2000 Derwent Publ Ltd. All rts. reserv.

0255499 DBA Accession No.: 2000-09989 PATENT

Novel Chlamydia 98 kDa putative outer membrane protein antigen, used for vaccination and protection against Chlamydia sp. infection. - plasmid pCAI396-mediated gene transfer and expression in host cell and DNA *probe"*** for Chlamydia pneumoniae infection therapy, nucleic acid

vaccine and gene therapy

AUTHOR: Murdin A D; Oomen R P; Dunn P L

CORPORATE SOURCE: Ontario, CA, USA.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200026237 PATENT DATE: 20000511 WPI ACCESSION NO.:

2000-365569 (2031)

PRIORITY APPLIC. NO.: US 428122 APPLIC. DATE: 19991027 NATIONAL APPLIC. NO.: WO 99GB3579 APPLIC. DATE: 19991029

LANGUAGE: English

ABSTRACT: A Chlamydia pneumoniae 98 kDa putative outer membrane protein antigen (928 amino acids) is new. Also claimed are: a *polynucleotide"*** (3,000 bp) encoding the protein; an expression cassette containing the *polynucleotide"*** linked to a promoter; an expression vector (e.g. plasmid pCAI396) containing the expression cassette; a host cell; producing the protein; a nucleic acid vaccine containing the expression cassette; methods for inducing an immune response in a mammal; a pharmaceutical composition containing an immunologically effective amount of the protein; and a DNA *probe"*** *reagent"*** (e.g. a DNA *primer"***) capable of *detecting"*** the presence of *Chlamydia"*** sp. The 98 kDa putative outer membrane protein and *polynucleotide"*** are used as vaccines for immunization, to provide protection against Chlamydia sp., especially Chlamydia pneumoniae infections. (93pp)

5/3,AB/27 (Item 4 from file: 357)

DIALOG(R) File 357: Derwent Biotechnology Abs (c) 2000 Derwent Publ Ltd. All rts. reserv.

0255485 DBA Accession No.: 2000-09975 PATENT

Isolated *polynucleotide"*** encoding a Chlamydia sp. polypeptide useful to treat, diagnose and prevent disease caused by Chlamydia sp. infection

- Chlamydia pneumoniae recombinant protein production via vector

plasmid-mediated gene transfer and expression in host cell for use in nucleic acid vaccine and recombinant vaccine

AUTHOR: Murdin A D; Oomen R P; Dunn P L

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200024902 PATENT DATE: 20000504 WPI ACCESSION NO.:

2000-350743 (2030)

PRIORITY APPLIC. NO .: US 427533 APPLIC. DATE: 19991026

NATIONAL APPLIC. NO.: WO 99GB2571 APPLIC. DATE: 19991028

LANGUAGE: English

ABSTRACT: An isolated *polynucleotide"*** (NI) which encodes an outer membrane protein of a strain of Chlamydia pneumoniae with a mol.wt. of 98,000, is new. Also claimed are: an isolated protein (PI) with a sequence which is at least 75% homologous to a 931 amino acid protein sequence (II), that is encoded by the 3,050 bp DNA sequence (I) which encodes (NI); a protein (PII) which consists of (PI) linked to a fusion protein; an expression DNA cassette which consists of (NI) operably linked to a promoter; an expression vector containing the DNA cassette; a host cell transformed with the vector; a method for producing recombinant (PI) involving culturing the transformed host cells; a which contains the DNA cassette; a composition vector containing (PI) and one or more Chlamydia sp. antigens; a DNA *probe"***/*primer"*** for *detecting"*** *Chlamydia"*** sp. biological material; an affinity chromatography method for purifying (PI); and an antibody specific for (PI). The above may be useful in nucleic acid vaccines and recombinant vaccines to treat or prevent disease caused by Chlamydia sp. infection. In an example, BALB/c mice were immunized with plasmid DNA via an i.m. injection. (101pp)

5/3,AB/28 (Item 5 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 2000 Derwent Publ Ltd. All rts. reserv.

0252084 DBA Accession No.: 2000-06574 PATENT

Novel antigens and corresponding DNA molecules that can be used to prevent, treat and diagnose disease caused by Chlamydia infection in mammals, especially humans - recombinant vaccine and nucleic acid vaccine

AUTHOR: Murdin A D; Oomen R P

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200011183 PATENT DATE: 20000302 WPI ACCESSION NO.:

2000-224703 (2019)

PRIORITY APPLIC. NO.: US 376770 APPLIC. DATE: 19990817 NATIONAL APPLIC. NO.: WO 991B1449 APPLIC. DATE: 19990818

LANGUAGE: English

ABSTRACT: Isolated Chlamydia pneumoniae proteins (I) encoded by one of the disclosed protein sequences of 147-970 amino acids are claimed. Also claimed are: a *polynucleotide"*** (II) encoding a protein having a protein sequence at least 75% homologous to or encoding a protein fragment of (I), where (II) has a disclosed DNA sequence of 650-3,200 bp; a (I) fusion protein encoded by one of the disclosed protein sequences linked to a fusion protein partner; an expression DNA cassette comprising one of the disclosed DNA sequences of (II) operably linked to a promoter; an expression vector comprising the cassette; a host cell transformed with the cassette; production of recombinant (I) involving culturing the transformed host cell to allow (I) expression - and recovering (I); a vaccine vector containing the DNA cassette; a DNA *probe"*** capable of *detecting"*** *Chlamydia"*** sp. in a biological material, where the *probe"*** is a sequence that *hybridizes"*** to one of the disclosed (II) sequences; a *hybridization"*** method for *detecting"*** *Chlamydia"*** spp.; an amplification method for *detecting"*** *Chlamydia"*** spp.; an affinity chromatography method for purifying a Chlamydia sp. antigen; and an antibody specific for (1). (201pp)

5/3,AB/29 (Item 6 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 2000 Derwent Publ Ltd. All rts. reserv.

O251981 DBA Accession No.: 2000-06471 PATENT

New synthetic or recombinant polypeptide, useful for diagnosing or preventing Chlamydia trachomatis infection is immunologically equivalent to a major outer membrane protein - expression in Escherichia coli, antibody and DNA *probe"***

AUTHOR: Agabian N; Stephens R; Kuo C C; Mullenbach G

CORPORATE SOURCE: Seattle, WA, USA.

PATENT ASSIGNEE: Washington-Res.Found. 2000

PATENT NUMBER: US 6030799 PATENT DATE: 20000229 WPI ACCESSION NO.:

2000-223163 (2019)

PRIORITY APPLIC. NO.: US 466152 APPLIC. DATE: 19950606 NATIONAL APPLIC. NO.: US 466152 APPLIC. DATE: 19950606

LANGUAGE: English

ABSTRACT: A recombinant or synthetic protein (394 or 116 amino acids) that elicits the production of antibodies to a major outer membrane protein (MOMP) of Chlamydia trachomatis that has a mol.wt. 38,000-45,000 by sodium dodecylsulfate polyacrylamide gel electrophoresis, is new. The protein can be produced by expression in Escherichia coli. Also claimed is an immunoassay to *detect"*** *Chlamydia"*** trachomatis, or antibodies to it. Also disclosed are production of proteins with the Searcher: Shears 308-4994

same immunological activity as MOMP by expressing a chimeric DNA construct and the MOMP-encoding *polynucleotide"*** or its fragment and their use as diagnostic DNA *probes"*** for *detecting"***
 *Chlamydia"*** sp. The protein can be used to elicit the production of antibodies to a MOMP of C. trachomatis. They can also be used as immunoassay *reagents"*** for detecting C. trachomatis or its antibodies, for diagnosing infection, or as an immunogen for vaccines.

(24pp)

5/3,AB/30 (Item 7 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 2000 Derwent Publ Ltd. All rts. reserv.

0251453 DBA Accession No.: 2000-05943 PATENT

Chlamydia pneumoniae antigens used for immunization and protection against Chlamydia diseases - recombinant vaccine and nucleic acid vaccine

AUTHOR: Murdin A D; Oomen R P; Dunn P L

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200006743 PATENT DATE: 20000210 WPI ACCESSION NO.:

2000-195303 (2017)

PRIORITY APPLIC. NO.: US 360434 APPLIC. DATE: 19990726 NATIONAL APPLIC. NO.: WO 991B1333 APPLIC. DATE: 19990727

LANGUAGE: English

ABSTRACT: Chlamydia pneumoniae antigens (II), and their corresponding *polynucleotides"*** (PNs) (II), are claimed. (I) are found in bacterial membrane structures and its external vicinity, in the inclusion membrane and its external vicinity, and are released into the cytoplasm of the infected cell. (II) is selected from a 961 bp sequence (disclosed), a sequence encoding a protein with a least 75% homology to a 265 amino acid protein sequence (disclosed) or a PN *hybridizing"*** under stringent conditions to the 961 bp sequence. Also claimed are: a protein with at least 75% homology to the 237 amino acid sequence; an expression cassette comprising (II) and a promoter; an expression vector containing the cassette; a host cell containing the cassette; producing recombinant CPN100314 protein by culturing the host cell; a vaccine vector containing the cassette; a pharmaceutical composition of and one or more known Chlamydia sp. antigens; a nucleic acid vaccine and method for vaccination; a DNA *probe"*** or DNA *primer"*** for *detecting"*** *Chlamydia"*** spp.; a *hybridization"*** method; an amplification method; an antibody specific for (I); and purification of CPN100314 by affinity chromatography. (52pp)

5/3,AB/31 (Item 8 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
(c) 2000 Derwent Publ Ltd. All rts. reserv.

0251452 DBA Accession No.: 2000-05942 PATENT New *polynucleotides"*** and Chlamydia pneumoniae outer membrane protein encoded by them for use as vaccines in treating and diagnosing chlamydial infections - recombinant vaccine and nucleic acid vaccine AUTHOR: Murdin A D; Oomen R P; Dunn P L CORPORATE SOURCE: Toronto, Ontario, Canada. PATENT ASSIGNEE: Connaught-Lab. 2000 PATENT NUMBER: WO 200006741 PATENT DATE: 20000210 WPI ACCESSION NO.: 2000-195302 (2017) PRIORITY APPLIC. NO.: US 361440 APPLIC. DATE: 19990726 NATIONAL APPLIC. NO.: WO 991B1330 APPLIC. DATE: 19990727 LANGUAGE: English ABSTRACT: Chlamydia pneumoniae outer membrane protein antigens (mpi or CPN100501 of 258 amino acid protein sequence) (II), and their corresponding *polynucleotides"*** (PNs) (II) (960 bp), are claimed. Also claimed are: PNs capable of *hybridizing"*** to the 960 bp sequence and their functional fragments. Also claimed are: a protein with at least 75% homology to the 249 amino acid sequence or a fragment; an expression cassette comprising (II); an expression vector and a transformed host cell; producing recombinant CPN100501 protein by culturing the host cell and recovering the protein; a vaccine vector containing the cassette; a pharmaceutical composition of (II) and one or more known Chlamydia sp. antigens; a nucleic acid vaccine and method for vaccination; a DNA *probe"*** or DNA *primer"*** for *detecting"*** *Chlamydia"*** spp.; a *hybridization"*** method; an antibody specific for (I); and purification of CPN100501 by affinity chromatography. (52pp) (Item 9 from file: 357) 5/3,AB/32 DIALOG(R) File 357: Derwent Biotechnology Abs (c) 2000 Derwent Publ Ltd. All rts. reserv. PATENT

0251451 DBA Accession No.: 2000-05941 Novel Chlamydia pneumoniae antigens used for immunization and protection against Chlamydia sp. diseases - recombinant protein production via vector-mediated gene transfer and expression in host for bronchitis or pneumonia diagnosis, recombinant vaccine and nucleic acid vaccine AUTHOR: Murdin A D; Oomen R P CORPORATE SOURCE: Toronto, Ontario, Canada. PATENT ASSIGNEE: Connaught-Lab. 2000 PATENT NUMBER: WO 200006739 PATENT DATE: 20000210 WPI ACCESSION NO.: 2000-183129 (2016) PRIORITY APPLIC. NO.: US 360707 APPLIC. DATE: 19990726 NATIONAL APPLIC. NO.: WO 99IB1328 APPLIC. DATE: 19990727 LANGUAGE: English ABSTRACT: An isolated *polynucleotide"*** (I), selected from a 1,169 bp DNA

sequence (specified) or its functional fragments, a *polynucleotide"*** encoding a protein which is at least 75% homologous to a 363 amino acid

Shears

Searcher

protein sequence or its functional fragments, which corresponds to a Chlamydia pneumoniae antigen gene and a *polynucleotide"*** which *hybridizes"*** to the above DNA sequence, are new. Also claimed are: an expression DNA cassette which consists of (I) operably linked to a promoter; an expression vector containing the above DNA cassette; a host cell transformed with the vector; a method for producing a recombinant CPN100202 protein which consists of culturing the transformed host cells under conditions that allow the expression of protein; a vaccine vector containing the DNA cassette; a composition containing the vaccine vector; a composition containing the above protein, an adjuvant and one or more known Chlamydia sp. antigens; a method for inducing an immune response in a mammal; a DNA *probe"***/*primer"*** for *detecting"*** *Chlamydia"*** sp.; and antibodies specific for CPN100202. The above may be useful as recombinant and nucleic acid vaccines for e.g. pneumonia and bronchitis. (45pp)

5/3,AB/33 (Item 10 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0230457 DBA Accession No.: 99-00558 PATENT

DNA *probe"*** for *detecting"*** *Chlamydia"*** trachomatis - comprises a

DNA sequence that *hybridizes"*** to major outer membrane protein DNA

or RNA

AUTHOR: Agabian N; Stephens R; Kuo C C; Mullenbach G CORPORATE SOURCE: Seattle, WA, USA; Emeryville, CA, USA. PATENT ASSIGNEE: Washington-Res.Found.; Chiron 1998

PATENT NUMBER: US 5821055 PATENT DATE: 981013 WPI ACCESSION NO.:

98-567652 (9848)

PRIORITY APPLIC. NO.: US 468451 APPLIC. DATE: 950606 NATIONAL APPLIC. NO.: US 468451 APPLIC. DATE: 950606 LANGUAGE: English

ABSTRACT: A DNA *probe"*** for *detecting"*** *Chlamydia"*** trachomatis is claimed and comprises a DNA sequence that specifically *hybridizes"*** to an RNA or DNA sequence encoding the C. trachomatis 38-45,000 major outer membrane protein (MOMP). Also disclosed are immunogenic proteins produced by expressing a chimeric DNA construct which comprises a *polynucleotide"*** encoding at least a portion of MOMP under the control of a regulatory sequence recognized by a unicellular host. Preferably, the DNA *probe"*** has a sequence complementary to at least 12 contiguous nucleotides of the MOMP DNA or RNA sequence, and has a detectable label, preferably a radionucleotide. The assay comprises contacting a sample with the DNA *probe"*** under *hybridization"*** conditions and detecting any hybrids formed, preferably the sample is treated to lyse any Chlamydia sp. to release the nucleic acids and the nucleic acids are fixed to a solid surface. The MOMP proteins are useful for detecting antibodies in blood and as the immunogenic Searcher : Shears 308-4994

09/428122

substance in vaccines. The MOMP DNA sequence is used as a labeled DNA *probe"*** for the diagnosis of C. trachomatis infection e.g. trachoma, pneumonia, etc. (15pp)

? ds; t 15/3,ab/1-34

Set	Items	Description - Authores)
S6	111	AU=(MURDIN, A? OR MURDIN A?)
S7	95	AU=(COMEN, R? OR COMEN R? OR OOMEN, R? OR OOMEN R?)
\$8	1991	AU=(DUNN, P? OR DUNN P?)
S9	27	S6 AND S7 AND S8
S10	44	S6 AND (S7 OR S8)
SII	27	S7 AND S8
S12	2126	S6 OR S7 OR S8
S13	19	S12 AND S1
S14	40	(S9_OR_S10_OR_S11_OR_S13) NOT_S4
S15	34	RD (unique items)

>>>No matching display code(s) found in file(s): 65, 113

15/3,AB/1 (Item 1 from file: 65)
DIALOG(R)File 65:Inside Conferences

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03400865 INSIDE CONFERENCE ITEM ID: CN035903732

Use of a Mouse Lung Challenge Model to Identify Antigens Protective against Chlamydia pneumoniae Lung Infection

Murdin, A. D.; Dunn, P.; Sodoyer, R.; Wang, J.; Caterini, J.; Brunham, R. C.; Aujame, L.; Oomen, R.

CONFERENCE: The potential etiologic role of Chlamydia pneumoniae in atherosclerosis-Meeting

5006.700, 2000; VOL 181; SUPPL 3 P: S544-S551

University of Chicago Press, 2000

ISSN: 0022-1899

LANGUAGE: English DOCUMENT TYPE: Conference Papers
CONFERENCE EDITOR(S): Gilbert, D. N.; Grayston, J. T.

CONFERENCE SPONSOR: Infectious Diseases Society of America

CONFERENCE LOCATION: Seattle, WA

CONFERENCE DATE: Sep 1999 (199909) (199909)

15/3,AB/2 (Item 1 from file: 144)

DIALOG(R) File 144: Pascal

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12004554 PASCAL No.: 95-0192951

Poliovirus hybrids expressing neutralization epitopes from variable domains I and IV of the major outer membrane protein of Chlamydia trachomatis elicit broadly cross-reactive C. trachomatis-neutralizing antibodies

MURDIN A D; HUA SU; KLEIN M H; CALDWELL H D

Connaught cent. biotechnology res., Willowdale ON M2R 3T4, Canada Journal: Infection and immunity, 1995, 63 (3) 1116-1121

Language: English

Trachoma and sexually transmitted diseases caused by Chlamydia trachomatis are major health problems worldwide. Epitopes from the variable domains of the major outer membrane protein are candidates for vaccine development. We have constructed hybrid polioviruses expressing sequences from major outer membrane protein variable domains I and IV. Antisera to the hybrids could, in combination, strongly neutralize 8 of the 12 C. trachomatis serovars most commonly associated with oculogenital infections and weakly neutralize the others

15/3, AB/3 (Item 2 from file: 144)

DIALOG(R) File 144: Pascal

(c) 2000 INIST/CNRS. All rts. reserv.

11279108 PASCAL No.: 94-0098409

A poliovirus hybrid expressing a neutralization epitope from the major outer membrane protein of Chlamydia trachomatis is highly immunogenic MURDIN A D; HUA SU; MANNING D S; KLEIN M H; PARNELL M J; CALDWELL H D Connaught cent. biotechnology res., Willowdale ON M2R 3T4, Canada Journal: Infection and immunity, 1993, 61 (10) 4406-4414 Language: English

Trachoma and sexually transmitted diseases caused by Chcamydia trachomatis are major health problems worldwide. Epitopes on the major outer membrane protein (MOMP) of C. trachomatis have been identified as important targets for the development of vaccines. In order to examine the immunogenicity of a recombinant vector expressing a chlamydial epitope, a poliovirus hybrid was constructed in which part of neutralization antigenic site I of poliovirus type 1 Mahoney (PV1-M) was replaced by a sequence from variable domain I of the MOMP of C. trachomatis serovar A. The chlamydial sequence included the neutralization epitope VAGLEK

15/3, AB/4 (Item 1 from file: 348) DIALOG(R) File 348: European Patents

(c) 2000 European Patent Office. All rts. reserv.

01211290

\$!(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
CHLAMYDIA ANTIGENE UND DEREN KORRESPONDIERENDE DNA FRAGMENTE UND
VERWENDUNGEN DAVON

ANTIGENES \$1(CHLAMYDIA), FRAGMENTS D'ADN CORRESPONDANTS, ET LEURS UTILISATIONS

PATENT ASSIGNEE:

Aventis Pasteur Limited, (3092160), 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

09/428122

MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., 29 Kennedy Street W., Aurora, Ontario L4G 2L6, (CA) WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA) DUNN, Pamela, Apartment 703, 370 Kaneff Crescent, Mississauga, Ontario L5A 4B8, (CA) PATENT (CC, No, Kind, Date): WO 0055326 000921 APPLICATION (CC, No, Date): WO 908862 000309; WO 00CA240 000309 PRIORITY (CC, No, Date): US 123966 990312 DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; A61K-039/02; C07K-016/12; C12N-015/62; C12Q-001/04; C12Q-001/70 LANGUAGE (Publication, Procedural, Application): English; English; English and the second s 15/3,AB/5 (Item 2 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01209069 Si(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE, KORRESPONDIERENDE DNA FRAGMENTE, UND DEREN VERWENDUNGEN ANTIGENES DE \$i(CHLAMYDIA), FRAGMENTS D'ADN CORRESPONDANTS, ET LEURS UTILISATIONS PATENT ASSIGNEE: Aventis Pasteur Limited, (3092160), 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., 29 Kennedy St. W., Aurora, Ontario L4G 2L6, (CA) WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA) DUNN, Pamela, Apt. 703, 370 Kaneff Crescent, Mississauga, Ontario L5A 4B8 , (CA) PATENT (CC, No, Kind, Date): WO 0053764 000914 APPLICATION (CC, No, Date): WO 908861 000309; WO 00CA239 000309 PRIORITY (CC, No, Date): US 123968 990312 DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; A61K-039/02; C07K-016/12; C12N-015/62; C12Q-001/04; C12Q-001/70 LANGUAGE (Publication, Procedural, Application): English; English; English 15/3, AB/6 (Item 3 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv.

01185277

\$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE, ENTSPRECHENDE DNA FRAGMENTE UND IHRE VERWENDUNGEN ANTIGENES DE \$i(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS UTILISATIONS DE CEUX-CI

PATENT ASSIGNEE:

CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., RR No. 1, Schomberg, Ontario L0G 1T0, (CA) WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA) PATENT (CC, No, Kind, Date):

WO 0039158 000706

APPLICATION (CC, No, Date): WO 99962008 991223; WO 99CA1230 _991223

PRIORITY (CC, No, Date): US 113280 981223; US 113281 981223; US 113282

981223; US 113283 981223; US 113284 981223; US 113285 981223; US 113385

981223; US 114050 981228; US 114056 981228; US 114057 981228; US 114058

981228; US 114059 981228; US 114061 981228

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C07K-014/295; C12N-015/31; C12N-015/62;

A61K-048/00; C12N-005/10; C12Q-001/68; C07K-016/12; A61K-039/118;

A61K-038/16; C07K-019/00; C12P-021/00; G01N-033/569

LANGUAGE (Publication, Procedural, Application): English; English

15/3,AB/7 (Item 4 from file: 348)
DIALOG(R)File 348:European Patents
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01185115

\$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE, ENTSPRECHENDE DNA FRAGMENTE UND IHRE VERWENDUNGEN ANTIGENES A \$i(CHLAMYDIA), FRAGMENTS D'ADN CORRESPONDANTS ET LEURS UTILISATIONS

PATENT ASSIGNEE:

CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., R.R. No. 1, Schomberg, Ontario L0G 1T0, (CA) WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA) DUNN, Pamela, Apartment 703, 370 Kaneff Crescent, Mississauga, Ontario L5A 4B8, (CA)

PATENT (CC, No, Kind, Date):

WO 0039157 000706

APPLICATION (CC, No, Date): WO 99960752 991222; WO 99CA1224 991222
PRIORITY (CC, No, Date): US 114060 981228; US 123967 990312; US 141271
Searcher: Shears 308-4994

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990630
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C07K-014/295; C12N-015/31; C12N-015/62;
  A61K-048/00; C12N-005/10; C12Q-001/68; C07K-016/12; A61K-039/118;
  A61K-038/16; C07K-019/00; C12P-021/00; G01N-033/569
LANGUAGE (Publication, Procedural, Application): English; English; English
1.5/3,AB/8
             (Item 5 from file: 348)
DIALOG(R) File 348: European Patents
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01175317
SI (CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
CHLAMYDIA ANTIGENE, DAFUR KODIERENDE DNA UND DEREN VERWENDUNG
ANTIGENES DE $i(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS ET LEUR
   UTILISATION
PATENT ASSIGNEE:
 CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West,
   Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all)
INVENTOR:
 MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA)
 OOMEN, Raymond, P., RR No. 1, Schomberg, Ontario LOG 1TO, (CA)
 WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA)
 DUNN, Pamela, Apartment 703, 370 Kaneff Crescent, Mississauga, Ontario
   L5A 4B8, (CA)
PATENT (CC, No, Kind, Date):
                             WO 0032784 000608
APPLICATION (CC, No, Date):
                             WO 99957786 991201; WO 99CA1148 991201
PRIORITY (CC, No, Date): US 110439 981201; US 132272 990503
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/11; C12N-015/62;
 C12N-015/63; C07K-014/295; C07K-016/12; C12Q-001/68; G01N-033/53;
 A61K-039/118; A61K-039/395; A61K-048/00
LANGUAGE (Publication, Procedural, Application): English; English; English
15/3,AB/9
             (Item 6 from file: 348)
DIALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
01175316
$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
CHLAMYDIA ANTIGENE UND DAFUR KODIERENDE DNA FRAGMENTE UND DEREN VERWENDUNG
AUT LOENES
           DE
                CHLAMYDIA
                           ET FRAGMENTS D'ADN CORRESPONDANTS ET LEUR
   UTILISATION
PATENT ASSIGNEE:
```

Searcher :

Shears

308-4994

09/428122

CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., RR No. 1, Schomberg, Ontario L0G 1T0, (CA) WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA) PATENT (CC, No, Kind, Date):

WO 0032794 000608

APPLICATION (CC, No, Date): WO 99957785 991201; WO 99CA1147 991201 PRIORITY (CC, No, Date): US 110339 981201; US 110340 981201; US 110427 981201; US 110428 981201; US 110438 981201

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C12N-015/62; C07K-014/295; C07K-016/12;

A61K-039/118; G01N-033/53; C12Q-001/68; C12N-005/10 ____ LANGUAGE (Publication, Procedural, Application): English; English

15/3,AB/10 (Item 7 from file: 348)
DIALOG(R)File 348:European Patents
(c) 2000 European Patent Office. All rts. reserv.

01166401

\$1(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
CHLAMYDIA ANTIGENE, DNS FRAGMENTE WELCHE FUR SOLCHE KODIEREN UND DEREN
VERWENDUNG

ANTIGENES DE CHLAMYDIA ET FRAGMENTS D'ADN CORRESPONDANTS ET LEURS UTILISATIONS

PATENT ASSIGNEE:

CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

MURDIN, Andrew, David, 146 Rhodes Circle Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, Peter, RR No. 1, Schomberg, Ontario L0G 1T0, (CA) DUNN, Pamela Lesley, Apartment 703, 3700 Kaneff Cr., Mississauga, Ontario L5A 4B8, (CA)

PATENT (CC, No, Kind, Date):

WO 0026239 000511

APPLICATION (CC, No, Date): WO 99954126 991102; WO 99GB3622 991102 PRIORITY (CC, No, Date): US 106590 981102; US 133071 990507; US 430723 991029

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C07K-014/00

LANGUAGE (Publication, Procedural, Application): English; English; English

15/3,AB/11 (Item 8 from file: 348) DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

01166382

\$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE UND DAFUR KODIERENDE DNA UND DEREN VERWENDUNG ANTIGENES A \$i(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS ET LE URS UTILISATIONS

PATENT ASSIGNEE:

CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

MURDIN, Andrew, David, 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA)

OOMEN, Raymond, Peter, RR No. 1, Schomberg, Ontario LOG 1TO, (CA)

DUNN, Pamela Lesley, Apartment 703, 3700 Kaneff Cr., Mississauga, Ontario L5A 4B8, (CA)

PATENT (CC, No, Kind, Date):

WO 0026376 000511

APPLICATION (CC, No, Date): WO 99954097 991029; WO 99GB3582 991029 PRIORITY (CC, No, Date): US 106071 981029; US 133202 990507; US 428589 991027

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/62; C07K-014/295;
C07K-016/12; C12Q-001/68; G01N-033/543; G01N-033/569; A61K-039/02;
A61K-048/00

LANGUAGE (Publication, Procedural, Application): English; English; English

15/3,AB/12 (Item 9 from file: 348)
DIALOG(R)File 348:European Patents

(c) 2000 European Patent Office. All rts. reserv.

01166380

\$1(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENES A \$1(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS ET LEURS
UTILISATIONS

PATENT ASSIGNEE:

CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR:

MURDIN, Andrew, David, 146 Rhodes Circle Newmarket, Newmarket, Ontario L3X 1V2, (CA)

OOMEN, Raymond, Peter, R.R. No. 1, Schomberg, Ontario LOG 1TO, (CA)
DUNN, Pamela, Lesley, Apartment 703, 3700 Kaneff Circle, Mississauga,
Ontario L5A 4B8, (CA)

PATENT (CC, No, Kind, Date):

WO 0026237 000511

APPLICATION (CC, No, Date): WO 99954095 991029; WO 99GB3579 991029 Searcher: Shears 308-4994

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PRIORITY (CC, No, Date): US 106070 981029; US 122066 990301; US 428122
    991027
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C07K-014/00
LANGUAGE (Publication, Procedural, Application): English; English; English
 15/3,AB/13
                (Item 10 from file: 348)
DIALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
01164418
$i(CHLAMYDIA) ANTIGENES AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
CHLAMYDIA POLYPEPTIDEN UND ENTSPECHENDE DNA FRAGMENTEN UND ANWENDUNGEN
    DAVON
ANTIGENES
                 $i(CHLAMYDIA), FRAGMENTS D'ADN CORRESPONDANT ET LEURS
   UTILISATIONS
PATENT ASSIGNEE:
  CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West,
    Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all)
INVENTOR:
  MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA)
  OOMEN, Raymond, P., RR No. 1, Schomberg, Ontario LOG 1TO, (CA)
  WANG, Joe, 48 29th Street, Etobicoke, Ontario M8W 3A8, (CA)
PATENT (CC, No, Kind, Date):
                              WO 0024765 000504
                              WO 99955602 991028; WO 99CA992 991028
APPLICATION (CC, No, Date):
PRICRITY (CC, No, Date): US 106034 981028; US 106044 981028; US 106039
    981028; US 106042 981028; US 106087 981029; US 106072 981029; US 106073
    981029; US 106074 981029; US 106589 981102; US 107034 981102; US 107035
    981102; US 106587 981102; US 106588 981102
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
 LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C07K-014/00
LANGUAGE (Publication, Procedural, Application): English; English; English
 15/3,AB/14
                (Item 11 from file: 348)
DTALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
01164128
$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
ANTIGENE AUS CHLAMYDIA UND ENTSPRECHENDE DNS-FRAGMENTE UND DEREN VERWENDUNG
ANTIGENES DE $1(CHLAMYDIA) ET FRAGMENTS CORRESPONDANTS D'ADN AINSI QUE
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CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West,

Shears

Searcher

LEURS UTILISATIONS

PATENT ASSIGNEE:

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Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all)
INVENTOR:
  MURDIN, Andrew, David, 146 Rhodes Circle, Newmarket, Ontario L3X 1V2,
    (CA)
  OOMEN, Raymond, Peter, RR No. 1, Schomberg, Ontario LOG 1TO, (CA)
  DUNN, Pamela Lesley, Apartment 703, 3700 Kaneff Circle, Mississauga,
    Ontario L5A 4B8, (CA)
PATENT (CC, No, Kind, Date):
                              WO 0024902 000504
APPLICATION (CC, No, Date):
                             WO 99951023 991028; WO 99GB3571 991028
PRIORITY (CC, No, Date): US 106046 981028; US 132271 990503; US 427533
    991026
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/62; C07K-014/295;
 C07K-016/12; C12Q-001/68; G01N-033/53; G01N-033/569; A61K-039/118;
 A61K-048/00
LANGUAGE (Publication, Procedural, Application): English; English; English
15/3, AB/15
               (Item 12 from file: 348)
DIALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
01164127
$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF
CHLAMYDIA ANTIGENE UND DAFUR KODIERENDE DNA UND DEREN VERWENDUNG
ANTIGENES DE $1(CHLAMYDIA )ET FRAGMENTS CORRESPONDANTS D'ADN AINSI QUE
   LEURS UTILISATIONS
PATENT ASSIGNEE:
 CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West,
   Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all)
INVENTOR:
 MURDIN, Andrew, David, 146 Rhodes Circle Newmarket, Newmarket, Ontario
   L3X 1V2, (CA)
 OOMEN, Raymond, Peter, RR No. 1, Schomberg, Ontario LOG 1TO, (CA)
 DUNN, Pamela Lesley, Apartment 703, 3700 Kaneff Cr., Mississauga, Ontario
   L5A 4B8, (CA)
PATENT (CC, No, Kind, Date):
                              WO 0024901 000504
APPLICATION (CC, No, Date): WO 99951017 991028; WO 99GB3565 991028
PRIORITY (CC, No, Date): US 106037 981028; US 154658 990920; US 427501
    991026
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
 LU; MC; NL; PT; SE
!NTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/62; C07K-014/295;
 C07K 016/12; C12Q-001/68; G01N-033/543; G01N-033/569; A61K-039/02;
 A61K-048/00
LANGUAGE (Publication, Procedural, Application): English; English; English
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Searcher

Shears

308-4994

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(Item 13 from file: 348)
 15/3,AB/16
DIALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
01141870
NUCLEIC
         ACID
                MOLECULES
                             ENCODING
                                        INCLUSION MEMBRANE PROTEIN C OF
    $i(CHLAMYDIA)
EINSCHLUSSMEMBRANPROTEIN C VON CHLAMYDIA KODIERENDE NUKLEINSAUREMOLEKULE
MOLECULES D'ACIDE NUCLEIQUE CODANT LA PROTEINE MEMBRANE D'INCLUSION C DE
    $i(CHLAMYDIA)
PATENT ASSIGNEE:
  CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West,
    Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all)
INVENTOR:
  MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA)
  DUNN, Pamela, L., Apt. 703, 3700 Kaneff Crescent, Mississauga, Ontario
    L5A 4B8, (CA)
  OOMEN, Raymond, P., RR No. 1, Schomberg, Ontario LOC 1TO, (CA)
PATENT (CC, No, Kind, Date):
                              WO 0011181 000302
APPLICATION (CC, No, Date):
                             WO 99939280 990819; WO 99CA766 990819
PRIORITY (CC, No, Date): US 97199 P 980820; US 132961 P 990507
DESIGNATED STATES: AT
INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; C07K-016/12;
 A61K-039/118
LANGUAGE (Publication, Procedural, Application): English; English; English
15/3,AB/17
                (Item 14 from file: 348)
DIALOG(R) File 348: European Patents
(c) 2000 European Patent Office. All rts. reserv.
01141869
NUCLEIC ACID MOLECULES ENCODING POMP91A PROTEIN OF $i(CHLAMYDIA)
NUKLEINSAUREN KODIEREND FUR POMP91A AUS CHLAMYDIA
MOLECULES D'ACIDE NUCLEIQUE CODANT LA PROTEINE POMP91A DE $i(CHLAMYDIA)
PATENT ASSIGNEE:
 CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West,
   Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all)
INVENTOR:
 MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA)
  DUNN, Pamela L., Apt. 703, 3700 Kaneff Crescent, Mississauga, Ontario L5A
    4B8, (CA)
 OOMEN, Raymond, P., RR No. 1, Schomberg, Ontario LOC 1TO, (CA)
PATENT (CC, No, Kind, Date):
                              WO 0011180 000302
APPLICATION (CC, No, Date):
                              WO 99939279 990819; WO 99CA765 990819
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Searcher

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Shears

308-4994

PRIORITY (CC, No, Date): US 97198 P 980820 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; A61K-048/00; A61K-031/70 LANGUAGE (Publication, Procedural, Application): English; English; English 15/3,AB/18 (Item 15 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01141773 \$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA-ANTIGENEN UND ENTSPRECHENDE DNA-FRAGMENTE UND IHRE VERWENDUNGEN \$i(CHLAMYDIA), FRAGMENTS D'ADN CORRESPONDANTS ET LEUR ANTIGENES DE UTILISATION PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., Rural Route Number 1, Schomberg, Ontario LOG 1T0, (CA) PATENT (CC, No, Kind, Date): WO 0011183 000302 APPLICATION (CC, No, Date): WO 99938465 990818; WO 99IB1449 990818 PRIORITY (CC, No, Date): US 97187 P 980820; US 97188 P 980820; US 97189 P 980820; US 97190 P 980820; US 97195 P 980820; US 97196 P 980820; US 97197 P 980820; US 97191 P 980827; US 376770 990817 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; C07K-016/12; C12Q-001/68; G01N-033/569; A61K-039/118; A61K-031/713 LANGUAGE (Publication, Procedural, Application): English; English; English 15/3,AB/19 (Item 16 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01134817 \$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF ANTIGENES \$i(CHLAMYDIA) ETFRAGMENTS D'ADN CORRESPONDANTS, DE UTILISATIONS DE CEUX-CI PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., Rural Route Number 1, Schomberg, Ontario LOG 1T0,

Searcher

:

Shears 308-4994

(CA) DUNN, Pamela, L., Apartment 703, 3700 Kaneff Circle, Mississauga, Ontario L5A 4B8, (CA) PATENT (CC, No, Kind, Date): WO 0006743 000210 APPLICATION (CC, No, Date): WO 99931399 990727; WO 99IB1333 990727 PRIORITY (CC, No, Date): US 94203 P 980727; US 122045 P 990301; US 360434 990726 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; C12N-001/21; C12N-005/10; C12N-015/62; A61K-039/118; C12Q-001/68; C07K-016/12; • C07K-001/22; G01N-033/569; A61K-048/00 LANGUAGE (Publication, Procedural, Application): English; English; English (Item 17 from file: 348) 15/3.AB/20 DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01134816 \$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF ANTIGENES DE \$i(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS, ET UTILISATIONS DE CEUX-CI PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., Rural Route Number 1, Schomberg, Ontario LOG 1TO, PATENT (CC, No, Kind, Date): WO 0006742 000210 APPLICATION (CC, No, Date): WO 99931397 990727; WO 99IB1331 990727 PRIORITY (CC, No, Date): US 94195 P 980727; US 361443 990726 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; C12N-001/21; C12N-005/10; C12N-015/62; A61K-039/118; C12Q-001/68; C07K-016/12; C07K-001/22; G01N-033/569; A61K-048/00 LANGUAGE (Publication, Procedural, Application): English; English; English 15/3,AB/21 (Item 18 from file: 348) DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01134815 \$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE, ENTSPRECHENDE DNA FRAGMENTE UND IHRE VERWENDUNGEN ANTIGENES DE \$i(CHLAMYDIA) ETFRAGMENTS D'ADN CORRESPONDANTS,

Searcher

:

Shears 308-4994

UTILISATIONS DE CEUX-CI PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond P., Rural Route Number 1, Schomberg, Ontario LOG 1TO, (CA) DUNN, Pamela L., Apt. 703, 3700 Kaneff Circle, Mississauga, Ontario L5A 4B8, (CA) PATENT (CC, No, Kind, Date): WO 0006741 000210 APPLICATION (CC, No, Date): WO 99931396 990727; WO 99IB1330 990727 PRIORITY (CC, No, Date): US 94192 P 980727; US 122044 P 990301; US 361440 990726 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C07K-014/295; C12N-001/21; C12N-005/10; C12N-015/62; A61K-039/118; C12Q-001/68; C07K-016/12; C07K-001/22; C12Q-001/04; A61K-031/70 LANGUAGE (Publication, Procedural, Application): English; English; English (Item 19 from file: 348) 15/3,AB/22 DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01134814 \$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE UND DAFUR KODIERENDE DNA UND DEREN VERWENDUNG ANTIGENES \$i(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS, DE UTILISATIONS DE CEUX-CI PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267453), 1755 Steeles Avenue West, Toronto, Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., Rural Route Number 1, Schomberg, Ontario LOG 1T0, PATENT (CC, No, Kind, Date): WO 0006739 000210 APPLICATION (CC, No, Date): WO 99931394 990727; WO 99IB1328 990727 PRIORITY (CC, No, Date): US 94198 P 980727; US 360707 990726 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/62; C07K-014/295; C07K-016/12; C12Q-001/68; G01N-033/53; G01N-033/543; G01N-033/569; A61K-039/02; A61K-048/00 LANGUAGE (Publication, Procedural, Application): English; English; English

15/3,AB/23 (Item 20 from file: 348)

DIALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 01132707 \$i(CHLAMYDIA) ANTIGENS AND CORRESPONDING DNA FRAGMENTS AND USES THEREOF CHLAMYDIA ANTIGENE UND DAFUR KODIERENDE DNA UND DEREN VERWENDUNG ANTIGENES DE \$i(CHLAMYDIA) ET FRAGMENTS D'ADN CORRESPONDANTS, UTILISATIONS DE CEUX-CI PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (Applicant designated States: all) INVENTOR: MURDIN, Andrew, D., 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) OOMEN, Raymond, P., Rural Route Number 1, Schomberg, Ontario LOG 1T0, PATENT (CC, No, Kind, Date): WO 0006740 000210 APPLICATION (CC, No, Date): WO 99931395 990727; WO 99IB1329 990727 PRIORITY (CC, No, Date): US 361040 990726; US 361040 990726 DESIGNATED STATES: AT INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-015/62; C07K-014/295; C07K-016/12; C12Q-001/68; G01N-033/53; G01N-033/543; G01N-033/569; A61K-039/02; A61K-048/00 LANGUAGE (Publication, Procedural, Application): English; English; English (Item 21 from file: 348) 15/3,AB/24 DlALOG(R) File 348: European Patents (c) 2000 European Patent Office. All rts. reserv. 00668910 HYBRID PICORNAVIRUSES EXPRESSING CHLAMYDIAL EPITOPES HYBRIDE PICORNAVIREN DIE CHLAMYDIA-EPITOPEN EXPRIMIEREN PICORNAVIRUS HYBRIDES EXPRIMANT DES EPITOPES CHLAMYDIENS PATENT ASSIGNEE: CONNAUGHT LABORATORIES LIMITED, (267451), 1755 Steeles Avenue West, Willowdale Ontario M2R 3T4, (CA), (applicant designated states: DE; FR; GB) INVENTOR: MURDIN, Andrew David, 146 Rhodes Circle, Newmarket, Ontario L3X 1V2, (CA) CALDWELL, Harlan Delano, 308 Thebian Lane, Hamilton, MT 59840, (US) KLEIN, Michel Henri, 16 Munro Boulevard, Willowdale, Ontario M2P 1B9, (CA) OOMEN, Raymond Peter, RR 1, Schomberg, Ontario LOG 1T0, (CA) LEGAL REPRESENTATIVE: Smart, Peter John (43071), W.H. BECK, GREENER & CO 7 Stone Buildings Lincoln's Inn, London WC2A 3SZ, (GB) PATENT (CC, No, Kind, Date): EP 698100 A1 960228 (Basic)

WO 9426900 941124

APPLICATION (CC, No, Date): EP 94915485 940512; WO 94CA262 940512
PRIORITY (CC, No, Date): US 60978 930513
DESIGNATED STATES: DE; FR; GB
INTERNATIONAL PATENT CLASS: C12N-015/31; C12N-007/00; C12N-015/86;
A61K-039/118; A61K-039/13; C12P-021/08; G01N-033/571; C12N-015/62;
NOTE:
No A-document published by EPO
LANGUAGE (Publication, Procedural, Application): English; English;

15/3, AB/25 (Ttem 1 from file: 357)
DIALOG(R) File 357: Derwent Biotechnology Abs
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0257727 DBA Accession No.: 2000-12217 PATENT

Novel Chlamydia sp. polynucleotides and polypetides useful for diagnosis, prevention and treatment of Chlamydia sp. infection in mammals - recombinant vaccine for bacterium infection therapy

AUTHOR: Murdin A D; Oomen R P; Wang J

CORPORATE SOURCE: Willowdale, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200039158 PATENT DATE: 20000706 WPI ACCESSION NO.:

2000-452369 (2039)

PRIORITY APPLIC. NO.: US 114061 APPLIC. DATE: 19981228
NATIONAL APPLIC. NO.: WO 99CA1230 APPLIC. DATE: 19991223
LANGUAGE: English

ABSTRACT: A DNA (I) with a DNA sequence which encodes a Chlamydia sp. protein having a protein sequence (S1) of 552, 196, 245, 278, 469, 922, 375, 871, 963, 514, 289, 265 or 95 amino acids, an immunogenic fragment with 12 consecutive amino acids from (S1) or a sequence 75% identical to (S1), is claimed. Also claimed are: a DNA (II) expressing a DNA sequence which is antisense to (I) operatively linked to a promoter; a DNA (III) with a DNA sequence which encodes a fusion protein with a protein encoded by (I) and an additional protein; a unicellular host with (I); a DNA probe (5-100 bp) that hybridizes to (I); a DNA primer (10-40 bp) which hybridizes to (I); a Chlamydia sp. protein (IV) encoded by (I), (II) or (III); preparation of (IV); an antibody (V) against (IV); a vaccine (VI) with (IV) or (I) and a vaccine vector; a kit with (I), (IV) or (V); and a method for identifying Chlamydia sp. protein which induces an immune response in a mouse and prevents or lessens the severity of Chlamydia sp. infection. (I), (IV), (V) or (VI) is useful for preventing Chlamydia sp. infection. (I), (IV) or (V) is useful for diagnosing Chlamydia sp. infection in mammalian body fluid. (215pp)

15/3, AB/26 (Item 2 from file: 357) D1ALOG(R) File 357: Derwent Biotechnology Abs (c) 2000 Derwent Publ Ltd. All rts. reserv.

0256650 DBA Accession No.: 2000-11140 PATENT

Nucleic acid encoding polypeptide antigens from Chlamydia useful for preventing, diagnosing and treating diseases such as community acquired pneumonia, bronchitis, sinusitis and asthmatic bronchitis, adult-onset asthma - method is useful for treating and diagnosing disease

AUTHOR: Murdin A D; Oomen R P; Wang J

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200032794 PATENT DATE: 20000608 WPI ACCESSION NO.:

2000-412339 (2035)

PRIORITY APPLIC. NO.: US 110438 APPLIC. DATE: 19981201 NATIONAL APPLIC. NO.: WO 99CA1147 APPLIC. DATE: 19991201

LANGUAGE: English

ABSTRACT: A new nucleic acid (NAM1) encoding protein (PEP1) antigens from Chlamydia is claimed. Also claimed are: a NAM1 containing a sequence; a nucleic acid molecule (NAM1') that contains an antisense sequence to NAM1; a nucleic acid molecule (NAM2) containing a sequence encoding a fusion protein; a vaccine composition (VAC1) containing a vaccine vector and NAM1 or NAM2 expressed as protein; a unicellular host (CELL1) transformed with either NAM1 or NAM2; a DNA probe of 5-100 bases hybridizing under stringent conditions to N1-N10; a primer of 10-40 nucleotides which hybridizes under stringent conditions to N1-N10; PEP1 encoded by NAM1 or NAM2; a fusion peptide (PEP2) containing PEP1 and a protein; a method (METH1) for producing PEP1 or PEP2; an antibody (anb1) against PEP1 or PEP2; a method (METH2) for treating Chlamydia infection; a method (METH3) for detecting Chlamydia infection; a diagnostic kit; a method (METH4) for identifying a PEP1 or PEP2. The nucleic acid may be used as diagnostic agents for detecting infection, e.g. community acquired pneumonia, upper respiratory tract disease and also used as primer and probes for diagnostic polymerase chain reaction. (173pp)

15/3, AB/27 (Item 3 from file: 357)
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0256648 DBA Accession No.: 2000-11138 PATENT

New polynucleotide encoding the Chlamydia sp. 98,000 outer membrane protein, useful for preventing or treating Chlamydia sp. infection - recombinant CPN100640 protein production via vector plasmid-mediated gene transfer and expression in Escherichia coli for therapy, gene therapy and recombinant vaccine

AUTHOR: Murdin A D; Oomen R P; Wang J; Dunn P

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200032784 PATENT DATE: 20000608 WPI ACCESSION NO.:

2000-412330 (2035)

PRIORITY APPLIC. NO.: US 132272 APPLIC. DATE: 19990503 NATIONAL APPLIC. NO.: WO 99US1148 APPLIC. DATE: 19991201

LANGUAGE: English

ABSTRACT: An isolated polynucleotide (NI) which encodes Chlamydia sp. outer membrane protein, designated CPN100640, which has a mol.wt. of 98,000, is new. (NI) consists of a 3,050 bp (I) or a 2,808 bp (II) DNA sequence (both specified), or encodes a protein with a protein sequence with at least 75% identical to the proteins encoded by (I) and (II). Also claimed are: a nucleic acid molecule (NAM) (NII) which consists of a DNA sequence that encodes a protein with a 936 (III) or a 925 (IV) amino acid protein sequence (both specified); a NAM (NIII) which encodes an antisense molecule of (NI); a NAM (NIV) which encodes a fusion protein containing the protein encoded by (NI); a vaccine consisting of (NI), (NII) or (NIV) and a vaccine vector; a host cell (e.g. Escherichia coli XL1=Blue) transformed with (NI) - (NIV) operatively linked to an expression control sequence (e.g. in vector plasmid pCAI640); a DNA probe and a DNA primer; proteins encoded by (NI) - (NIV); a method for producing the protein by culturing the host cells; antibodies specific for the proteins; and a recombinant vaccine. The above may be useful for Chlamydia sp. infection therapy and gene therapy.

15/3,AB/28 (Item 4 from file: 357)
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0255529 DBA Accession No.: 2000-10019 PATENT

Novel Chlamydia sp. PilG-like protein antigen, used for vaccination and protection against Chlamydia sp. infection - recombinant protein production via vector plasmid-mediated gene transfer and expression in transgenic mouse for use as a nucleic acid vaccine or recombinant vaccine

AUTHOR: Murdin A D; Oomen R P; Dunn P L CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200026376 PATENT DATE: 20000511 WPI ACCESSION NO.:

2000-365623 (2031)

PRIORITY APPLIC. NO.: US 428589 APPLIC. DATE: 19991027 NATIONAL APPLIC. NO.: WO 99GB3582 APPLIC. DATE: 19991029

LANGUAGE: English

ABSTRACT: A Chlamydia pneumoniae PilG-like protein antigen and a polynucleotide (I) which has a 1,400 bp DNA sequence or encodes a protein with a sequence at least 75% identical to a 391 amino acid protein sequence (both specified), is new. Also claimed are: an isolated protein (II) which is encoded by a sequence with at least 75% identity with a 391 amino acid protein sequence; a DNA cassette which contains (I) operably linked to a promoter; an expression vector containing the DNA cassette; a host cell transformed with the DNA Searcher: Shears 308-4994

cassette; a method for producing a recombinant protein by culturing the transformed host cells; a vaccine vector containing the DNA cassette; a DNA probe/primer for detecting the presence of Chlamydia sp. in a biological material; an affinity chromatography method for purifying (II); and an antibody specific for (II). The above may be useful as nucleic acid and recombinant vaccines for immunizing subjects against Chlamydia sp. infections, especially Chlamydia pneumonia infection. Vector plasmid pCAI419 may be used as a nucleic acid vaccine against C. pneumonia infection in BALB/c mice. (88pp)

15/3,AB/29 (Item 5 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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0255471 DBA Accession No.: 2000-09961 PATENT

Chlamydia antigens and the proteins they encode, useful for vaccination against Chlamydia infections that affect the respiratory tract - method is useful for preventing, treating, and diagnosing Chlamydia infection

AUTHOR: Murdin A D; Oomen R P; Wang J

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200024765 PATENT DATE: 20000504 WPI ACCESSION NO.:

2000-350688 (2030)

PRIORITY APPLIC. NO.: US 106588 APPLIC. DATE: 19981102
NATIONAL APPLIC. NO.: WO 99CA992 APPLIC. DATE: 19991028

LANGUAGE: English

ABSTRACT: New nucleic acids (A) encoding Chlamydia antigens and the proteins (B) they express are claimed. Also claimed are: a nucleic acid molecule (A) containing a sequence encoding a protein (B); a protein encoded by (A); a nucleic acid encoding a fusion protein of the protein encoded by (A) and an additional protein; a fusion protein containing (B) and another protein; a vaccine (C) containing (A) and a vaccine vector which express (B) encoding an extra protein (J) which enhances the immune response to (A) and (B); a nucleic acid probe (E) of 5 to 100 nucleotides which hybridizes under stringent conditions to disclosed sequences; a unicellular host (G) transformed with (A); a method for producing (B) by culturing (G); a vaccine (H) comprising (B); an antibody (K) against (B); a method for preventing or treating Chlamydia infection; a method for detecting Chlamydia infection; and a diagnostic kit. The nucleic acids may be used for the recombinant production of Chlamydia protein and also as DNA probes for detecting the presence of Chlamydia nucleic acid. The proteins may be used to against Chlamydia infections in mammals and for the production of antibodies. (165pp)

15/3, AB/30 (Item 6 from file: 357)
DIALOG(R) File 357: Derwent Biotechnology Abs

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0252215 DBA Accession No.: 2000-06705 PATENT

Nucleic acid molecule encoding an inclusion membrane protein-C of a strain of Chlamydia, useful as a vaccine for immunizing against Chlamydia infection - nucleic acid vaccine

AUTHOR: Murdin A D; Dunn P L; Oomen R P

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200011181 PATENT DATE: 20000302 WPI ACCESSION NO.:

2000-224701 (2019)

PRIORITY APPLIC. NO.: US 132961 APPLIC. DATE: 19990507 NATIONAL APPLIC. NO.: WO 99CA766 APPLIC. DATE: 19990819

LANGUAGE: English

ABSTRACT: An isolated and purified nucleic acid molecule (I) of 750-bp (DNA sequence disclosed) encoding an inclusion membrane protein-C (II) of 203 amino acids (protein sequence disclosed) of Chlamydia sp. is claimed. Also claimed are: an expression DNA cassette containing (I); an expression vector containing the DNA cassette; and a vaccine vector containing (I). (I) is useful as a nucleic acid vaccine against Chlamydia spp. infection. Also disclosed are: monoclonal antibodies specific for (II); a method for diagnosis of Chlamydia sp. infection in a biological sample; and a method for purifying (II) involving antibody-based affinity chromatography. (II) is administered at a dose of 10 ug to 500 mg, preferably 100 ug, and administration is parenterally. (I) is obtained from Chlamydia sp. by polymerase chain reaction amplification of the genomic DNA using synthetic oligonucleotide primers matching 5' and 3' ends of the coding domain. The primers are designed according to the sequence of (I). Each primer has 10-40 (15-25) nucleotides. Each primer has at least 40% C and G content to ensure efficient hybridization. (62pp)

15/3, AB/31 (Item 7 from file: 357)
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0252214 DBA Accession No.: 2000-06704 PATENT

New nucleic acid encoding POMP91A protein from a strain of Chlamydia useful for preventing, treating and diagnosing Chlamydia infection - plasmid pCAI327 for use as a nucleic acid vaccine

AUTHOR: Murdin A D; Dunn P L; Oomen R P CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200011180 PATENT DATE: 20000302 WPI ACCESSION NO.:

2000-224700 (2019)

PRIORITY APPLIC. NO.: US 97198 APPLIC. DATE: 19980820 NATIONAL APPLIC. NO.: WO 99CA765 APPLIC. DATE: 19990819

LANGUAGE: English

ABSTRACT: An isolated and purified nucleic acid molecule (I) encoding a POMP91A protein or polypeptide fragment of POMP91A from a strain of Chlamydia sp. (Chlamydia pneumoniae) is claimed. Also claimed are: an expression cassette containing (I) under the control of elements required for expression of (I); an expression vector containing the expression cassette; a vaccine vector comprising (I) under the control of elements needed for expression of (I); and an antibody that specifically binds to a protein of disclosed 947 amino acid protein sequence or a fragment containing the binding domain of this protein. (I) is used as a nucleic acid vaccine for prevention, therapy and diagnosis of Chlamydia sp. infection. Vaccine vectors containing (I) are used to induce an immune response against Chlamydia spp. (I) or a monoclonal antibody specific for POMP91A can be used in diagnosis of Chlamydia in a biological sample. Cells transformed or transfected with (I) are disclosed for production of POMP91A. (I) has the disclosed DNA sequence of 3,050 bp or has a sequence complementary to this. The Chlamydia sp. POMP91A gene is disclosed too. The vector is preferably plasmid pCAI327. (98pp)

15/3, AB/32 (Item 8 from file: 357)
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0252074 DBA Accession No.: 2000-06564 PATENT

Chlamydia pneumoniae antigens used for immunization and protection against.

Chlamydia diseases - such as community acquired pneumonia and upper respiratory tract infections such as bronchitis and sinusitis

AUTHOR: Murdin A D; Oomen R P

CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200006742 PATENT DATE: 20000210 WPI ACCESSION NO.:

2000-205466 (2018)

PRIORITY APPLIC. NO.: US 361443 APPLIC. DATE: 19990726 NATIONAL APPLIC. NO.: WO 99IB1331 APPLIC. DATE: 19990727

LANGUAGE: English

pneumoniae antigens, their corresponding Chlamydia and polynucleotides (I), are claimed. Also claimed are: an isolated protein; an expression cassette (EC) comprising (I); an expression vector, a host cell and a vaccine vector comprising the EC; production of a recombinant CPN100605 protein; induction of an immune response in a polynucleotide probe reagent; a hybridization, amplification and an affinity chromatography method; and an antibody that immunospecifically binds the protein of (I). The C. pneumoniae polynucleotides and proteins can be used in vaccination methods for preventing and treating Chlamydia infection. The polynucleotides can be used to produce the proteins recombinantly, in the construction of vaccine vectors, as a vaccine agent, and in the construction of an attenuated Chlamydia strain. The proteins are also useful as vaccine Shears Searcher : 308-4994

agents and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia and upper respiratory tract infections such as bronchitis and sinusitis. (48pp)

15/3, AB/33 (Item 9 from file: 357)
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0252073 DBA Accession No.: 2000-06563 PATENT

Novel Chlamydia pneumoniae antigens used for immunization and protection against Chlamydia diseases - such as community acquired pneumonia and upper respiratory tract infections such as bronchitis and sinusitis

AUTHOR: Murdin A D; Oomen R P

-CORPORATE SOURCE: Toronto, Ontario, Canada.

PATENT ASSIGNEE: Connaught-Lab. 2000

PATENT NUMBER: WO 200006740 PATENT DATE: 20000210 WPI ACCESSION NO.:

2000-205465 (2018)

PRIORITY APPLIC. NO.: US 361040 APPLIC. DATE: 19990726 NATIONAL APPLIC. NO.: WO 991B1329 APPLIC. DATE: 19990727

LANGUAGE: English

pneumoniae antigens their Chlamydia and corresponding polynucleotides (I), are claimed. These polynucleotides are found in the bacterial membrane structure and its external vicinity and are released into the cytoplasm of the infected cell. Also claimed are: an isolated protein; an expression cassette (EC) comprising (I); an expression vector, a host cell and a vaccine vector comprising the EC; production of a recombinant CPN100149 protein; induction of an immune response in a mammal; a polynucleotide probe reagent; a hybridization, an amplification and an affinity chromatography method; and an antibody that immunospecifically binds the protein of (I). The C. pneumoniae polynucleotides and proteins can be used in vaccination methods for preventing and treating Chlamydia infection. The polynucleotides can be used to produce the proteins recombinantly in the construction of vaccine vectors as a vaccine agent and in the construction of an attenuated Chlamydia strain. The proteins are also useful as vaccine and for the preparation of medicaments for treating or preventing Chlamydia infection, e.g. community acquired pneumonia and upper respiratory tract infections. (51pp)

15/3,AB/34 (Item 10 from file: 357)
DIALOG(R)File 357:Derwent Biotechnology Abs
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Ol74645 DBA Accession No.: 95-01466 PATENT

New hybrid picorna viruses expressing chlamydial epitopes - Chlamydia trachomatis epitope expression in polio virus, for recombinant vaccine Searcher: Shears 308-4994

and antibody production

AUTHOR: Murdin A D; Caldwell H D; Klein M H; Oomen R P

PATENT ASSIGNEE: Connaught 1994

PATENT NUMBER: WO 9426900 PATENT DATE: 941124 WPI ACCESSION NO.:

95.006796 (9501)

PRIORITY APPLIC. NO.: US 60978 APPLIC. DATE: 930513
NATIONAL APPLIC. NO.: WO 94CA262 APPLIC. DATE: 940512

LANGUAGE: English

ABSTRACT: The following are claimed: (1) a hybrid picorna virus (PV) which expresses at least one chlamydial epitope and is capable of inducing antibodies immunoreactive with at least 3 different Chlamydia trachomatis serovars; (2) an isolated nucleic acid molecule composed of at least a portion encoding (1); (3) an antibody, immunoreactive with at least 3 different Chlamydia serovars, produced from (1) or (2); (4) a diagnostic kit for detecting the presence of Chlamydia in a sample; and (5) methods of modifying a protein having a surface exposed loop of known sequence to produce a hybrid protein. The methods can be used to modify a surface exposed loop of a protein to produce a hybrid protein including a target protein sequence for eliciting an immune response at high efficiency. The hybrid PVs grow to a high titer and induce a strong and cross-reactive anti-chlamydial response at the same time as inducing a strong anti-polio immune response. The PVs are preferably polio virus PV1-Ct7 PV1-Ct8 PV1-CtIVA PV1-CtIVB PV1-CtIVC. The hybrid PVs can be used for vaccination, diagnosis, treatment of chlamydial infections and generation of immunological reagents. (99pp)

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